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Selected Field Hockey and Lacrosse Articles

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HARRIET STEWART, Editor
Ohio Wesleyan University
Delaware, Ohio

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Preface

All of the articles included in this edition have appeared in the *Field Hockey - Lacrosse Guides* published since the last edition of the *Selected Field Hockey and Lacrosse Articles* in 1963 and are representative of the period 1964 to 1970. A study of the articles reveals the trends and concerns of this period. These trends have influenced the selection of the articles.

The interest in skills and strategy has continued, as it should. The importance of this continuing trend is evident in the improved skill level of the players and the increased number of participants.

One notable trend was the increased concern with umpiring. The number of articles about umpiring has increased in the most recent *Guides.* Competition on all levels (high school through international) is gaining more attention. Touring teams and international conferences have become of interest to players of all levels of ability. International competition, formerly limited to relatively few, now has become a goal attainable by many.

Two other trends, although not as well established as those already mentioned, are in the areas of research and men's participation in field hockey. As participation and interest in field hockey and lacrosse increases and as the number of people doing advanced study in physical education increases, it is reasonable to expect more research to be done. The interest in the area of men's field hockey in this country has been aided by news coverage and attendance at the Olympic Games as well as by promotion done by the men's field hockey national organization.

It is noteworthy that this edition of *Selected Field Hockey and Lacrosse Articles* is published in the year that the United States Field Hockey Association celebrates its 50th anniversary and the United States Women's Lacrosse Association its 40th anniversary.

Harriet Stewart
Editor

The First Playing Lesson in Field Hockey

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The most difficult class to teach in the field hockey unit is the first playing lesson. Contrary to some thought, it should come very early in the student's experience with the game. As soon as the girls can dribble, pass, and tackle, they are ready to play. Indeed, if the game is withheld for additional skills, interest will wane.

A great body of rules and strategies compose the game but they are *not* essential to this lesson. The foul framework eliminates only dangerous play; sticks and dangerous hitting should be penalized. Additional fouls may be presented *as they occur in play*, but only in subsequent lessons.

What follows can be presented in a 40-minute class to students who have never even seen a field hockey match nor played any of the similar 11-player field games. This plan permits about 20 minutes of playing time with reasonable understanding of the play.

It is easier to begin in the gym where the space is limited and the voice unstrained. Pinnies are given to 11 girls, and each is assigned a position using the basketball division line as the 50-yard line. Forewarn an additional 11 girls that they will be asked to make up the nonpinnie team. A sample lesson follows:

"There are five forwards in the front of the team. They are called the forward line because they *play* as a line—a center forward in the middle (place her on the line), a right and left inner on each side (wait for them to assume positions also on the line), and a right and left wing on the outside of the line (place them in position). They are called wings because they really make the team fly. These five forwards collectively have two jobs: to take the ball down the field and to put it in the goal. They do this by dribbling and passing as you have practiced in class, getting rid of the ball *before* they're tackled. The first girl receiving the ball in the circle shoots for the goal, and all the other forwards rush in to complete the job." Enough said here! Subsequent lessons will refine the jobs of each of the forwards.

"Behind the forwards are the three girls with the greatest stamina, the halfbacks. The center halfback is the cleverest and most skilled and directs play (place a bright girl behind the center forward). The right and left halfbacks are positioned behind the wings and slightly toward the center (two girls assume these positions). Farther back are two fullbacks, right and left—one behind each inner and farther

back than the halfbacks (permit two more girls to get into position). The team is completed with a goalie a step or two in front of the goal cage. She should be quick and agile and is only insurance. Goals are not her 'fault,' for each forward has her own opponent who should stop her *before* she gets to the goal mouth." This last statement rules out the assignment to the goal of the sluggish 'nobody' who dissolves in tears at the tirade of her teammates.

Turning to the second 11 girls, ask each to take her position facing the other team, forwards close enough to shake hands, as you call them out, "Center forward, right and left inners, right and left wings, center, right and left halfbacks, right and left fullbacks, and the quick goalie."

Ask all the forwards to raise their hands, five on each team facing one another. Wait for each of the 10 to realize her position. "Halfbacks and fullbacks, raise your hands!" Wait for compliance and help only where needed. "Forwards, please go forward, around the forward in front of you, and toward the goal until you come to someone on the other team and stop! Tell that girls the name of your position, i.e., center halfback (see Figure 1). This girl, forwards, is your *opponent!* . . . the one who will try to tackle and take the ball away from you. As you can see, each forward has her own opponent, so you will NOT have several players trying to get the ball at the same time.

"Each halfback and fullback, then, has two different jobs: to take the ball from her own opponent and to give it to her own forwards. This is done with the stick tackle you have practiced, a short push right to avoid your opponent tackling back and a chance for you to look up followed by a nice pass up *in front of* one of your own forwards.

"Now we are almost ready to play! Will the center forwards face each other, straddling the center line, with each stick beside the ball? This starting technique is a bully. Each player should learn to do this well. You may practice before class begins." The instructor takes both sticks and touches each to the ground and the opponent's stick lightly and quickly three times as the players hold the sticks with the right hand slipped down slightly. This gives the players the 'feel' of the bully without wasting time. "The minute the bully is complete, that is, when the sticks have touched for the third time, the center forwards may attempt to pass the ball. Regardless of where the ball may go, the other forwards, both wings and inners, should have crossed over the 50-yard line into the opponent's territory to receive a pass. Thus, as we crossed over a minute ago, each forward comes upon her own opponent who 'marks' or pays attention to her especially.

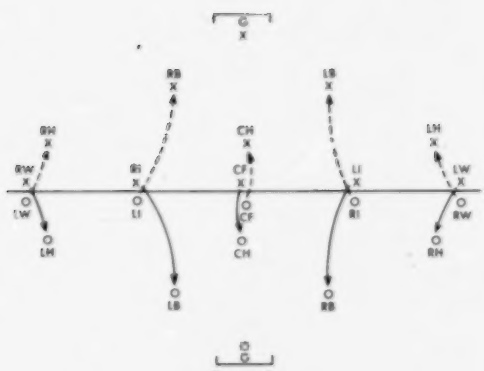

Figure 1

"Now we'll move outdoors to the field spreading out across the whole field with the wings lined up in the alleys at each side of the field. And away we go."

Small direction is needed now to play happily for 20 satisfying minutes. Infrequent repositioning will reinforce instruction, but let the girls run free! Don't stop this first lesson with additional strategies or techniques.

The next lesson may well begin exactly like this one, but let the girls "shotgun," i.e., run to any position, provided they can remember the name of the position and its corresponding job.

Before starting play in future lessons, introductory skill lessons can include the five-man dribble and pass relay from the center of the field. The first player to contact the ball in the circle *controls* and shoots. This leads to easy grasp of forward play.

A tackle drill that asks the tackler to control, push right, and look up before passing to the next line establishes a sequence for the defense to use in the game situation.

Keep it simple and *let* the girls *play!*

Hockey for Large Classes

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It is most disheartening for those who love to play field hockey and who have taught the game to others to learn of instances where the game has been omitted from the high school curriculum because the physical education classes are too large. It is equally difficult to agree with those who feel that a team sport like field hockey cannot be taught safely to large classes with any degree of success.

Large enrollments should never discourage the teaching of any sport. Hockey, like all other sports, can be taught effectively, safely, and with adequate participation and enjoyment for all.

For purposes of this article a large class is defined as one with a registration figure over sixty. The suggestions and recommendations offered are based on a class of sixty or more girls meeting three times a week for a forty-minute activity period. The time span of the unit suggested is eight weeks, and the minimum space needs are a field about 40 yards by 75 yards for games and a practice area of about 40 yards by 40 yards.

In defining the broader objectives for the teaching of field hockey to large groups it is important that the above factors be kept in mind.

The over-all goals should include maximum participation, a working knowledge of rules for play, and sufficient awareness of safety to permit unsupervised practice.

What specific means are taken towards reaching these ends?

1. Start by teaching the actual game. Do not plan to teach hockey lead-up or hockey-type games in place of or previous to teaching the actual game. Use all available time in teaching one set of rules; do not confuse your students with "modified hockey."

2. Have your students play the game as soon and as often as possible. Put your pupils on the field and in a game as soon as possible after the first or introductory lesson. The sooner the students play the game, the greater the number of learning opportunities will be. Increased play also gives the students a better feel for the game. Rules and skills are far more meaningful when applied to game situations and related to personal experience rather than taught independently of actual play.

3. Demonstrate, teach, and practice only the most essential techniques. Select only those techniques essential to the game at the ability level of your class and then, more important, stress and insist upon perfection in their execution. In a large class, the mastery of a few techniques is better and safer than learning "a little bit about a lot."

4. Select simple, uncomplicated, and easy formations to organize for the practice of techniques. The formation best suited for the practice of a specific technique is one which permits ample participation by all in a minimum of time and without the use of large areas. Eliminate any formation which involves moving about to get organized or one in which long intervals elapse between each individual's opportunity to practice. A formal type of organization (single line drills) has proven to be far more effective with the high school girl in a large class than an informal arrangement where the students practice wherever or with whomever they wish.

5. Give team captains responsibility for the practice of techniques. Since the primary objective is the actual game, a teacher's time is more wisely spent coaching the game rather than supervising the practice of techniques. With large classes not all the students can play at the same time; therefore, it is extremely important that side line practice sessions be well directed to be meaningful. Team captains should be given specific instructions for each practice period, and they should assume the important responsibility of leadership.

6. Schedule practice games so that every team receives the benefit of coaching at least once a week. Make certain that each team is observed a minimum of once a week in actual game play. Points to be stressed should be outlined. The teacher must be certain that all teams receive the same information. This can be done by keeping the same teams and players for the duration of the practice game schedule.

7. Coach according to position rather than individual. In coaching the practice games the major emphasis should be on positioning. It is extremely helpful for the teacher and players to have both teams wear pinnies with positions well marked on them. Positioning problems can be detected much sooner when it is evident at a glance where each player is supposed to be.

8. Permit nothing to interfere with the continuity of daily and weekly plans. Outdoor play can be extended if players dress warmly on cool or windy days. On rainy days the lessons may be continued indoors. If space permits, an actual game can be played indoors. The wooden floor can be protected by asking each player to cover the blade of the stick with a sock fastened by a rubber band. The

hockey ball can be covered with a sock. If space is limited, then practice techniques.

9. Utilize every moment of class time for instruction. Attendance and other class routines can be handled at the same time that warm-up drills are being practiced. The posting of teams, positions, and game schedules will save valuable class time.

Just exactly what should be taught to large classes? What is considered essential in order to ensure enjoyment and safety?

There are several basic skills of the game which must be practiced to assure success. An entire lesson needs to be devoted to the grip, dribbling, hitting, and fielding the ball. Hitting and controlling the ball should be taught and practiced in motion and never in a stationary position. It is important to teach everyone how to tackle safety. Understanding of when and how to use the left-hand lunge and the circular tackle is also important. Two simple dodges (staircase and non-stick side dodge) are essential, but the teacher should also insist upon the applications in game situations. Passing needs to be taught, emphasizing the difference between "flat" and "through" passes. Players should have an opportunity to practice receiving passes from the left, from the right, and from behind.

Time must be devoted to teaching the offensive and defensive roles of all players and the responsibilities of each position. The forwards must understand their role as a unit, and the halfbacks must be familiar with their obligation to "back up" the forward line. Both halfbacks and fullbacks must learn a defensive system of marking and covering. The goalkeepers must know their privileges, and all players should know how to position for corners, roll-ins, and free hits. With regard to rules, only the boundary rules and the most common fouls and penalties need to be stressed.

How can all this be taught within the limits of an eight-week unit?

Each week of the unit should be devoted to the learning and practice of a particular series of techniques stressing one or two points dealing with game situations.

At the first meeting of each week of the unit, the entire class should be taught a series of techniques which will be stressed during the coached games for that week. Having the teacher present this lesson to everyone in the class helps ensure common understanding on the part of all players. During the second meeting of the week, one half of the class (two teams plus substitutes) should be assigned to a practice game with the teacher coaching and stressing the predetermined points of positioning, rules, or strategy. The other half of the group practices those techniques taught during the

preceding meeting. On the third meeting of the week, activities are reversed with the teacher continuing to coach the game. This pattern should remain the same for about six weeks. Then organization can begin on a class tournament which serves a climax and helps crystallize all the information presented.

It is also helpful to make use of weekly written assignments on information that can be readily learned from a rule book or hockey text. Properly handled large classes will learn and enjoy hockey.

Equipment Suggestions or Large Classes

Several problems arise with large classes, but a limited budget for hockey supplies could hardly be a reason for denying students the joys of hockey.

Not all the students need have a stick in their possession the entire class period. Only 22 sticks are needed for a game, but since hockey sticks vary according to length and weight, more will be needed to accommodate an average size class. If there is a limited supply of sticks, one or two sticks can be shared by the same squad for the practice of techniques. When this is the case, squads should be grouped by stick size.

The length of a stick is more important than the weight of the stick for a class of average ability. Students should be shown how to select a stick of sufficient length for their individual use. The best suggested method is to have each student get the "feel" of the stick by taking a few strokes at an imaginary ball with her eyes closed. The blade of the stick should just touch the top of the grass. Another method of stick selection is to have each girl measure a stick by placing it alongside her leg. The top of the stick should come up to the top of her hip bone. However, individuals of the same height have varying arm lengths and this method is not always accurate.

Plastic covered practice and game balls are recommended. Balls of this type can be washed, never have to be painted, and do not get heavy or out of shape when used on wet surfaces.

Since shinguards are worn only during games, 20 pairs are all that are necessary for a class of any size. A minimum of protection provided in practice encourages better footwork and neater stickwork.

The goalkeeper's equipment should not present any problem. The protective pads worn by a goalkeeper do not vary in size so that two pairs should be sufficient. Goalkeeper's shoes are sold according to foot size, and therefore, it is wiser to purchase kickers. These kickers have a metal protective front to provide adequate safety and can be strapped over sneakers or hockey shoes and adjusted to various shoe sizes.

The Art of Goalkeeping

JENEPHER P. SHILLINGFORD
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The two primary factors for a coach to consider in the development of a competent goalkeeper are the *selection* and the *instruction* of the right individual. Being able to choose a goalie oneself is preferable to inheriting one with previously established habits. The coach should seek the following attributes in the candidates:

1. Physical Characteristics

a. *Good reaction time.* Remember that reaction time can often be "masked" by factors such as anticipation (or lack of it) and confidence.
b. *Agility.*
c. *Speed.* Speed is a composite of the above-mentioned characteristics.
d. *Endurance.* Endurance for a goalkeeper takes a slightly different form from that needed for a halfback. A more apt description of this characteristic might be "staying power," or the ability to bounce back.
e. *Good eyesight.*

2. Emotional Characteristics

a. *Confidence. Webster's* describes confidence as "a belief in the reliability of one's skills." Perhaps the greatest reason for well-regulated goalie practices is to establish confidence.
b. *Courage.* Obviously, the goal is not the proper location for a "shrinking violet." However, courage, based on one's confidence in his own ability, can be developed. I have had some degree of success in working with frightened goalies, and I would suggest that there are two types of fear connected with goalkeeping: one is fear of the ball; the other is fear of failure. In order to work with this problem, the coach must determine which of these two fears is present. Fear of the ball can be corrected by constant practice and illustration of how to protect oneself, while fear of failure can usually be overcome by placing the individual in many game situations where success may be fairly well assured.
c. *Pleasant Personality.*

3. Mental Characteristics

a. *Intelligence.*

b. *Anticipation.* No other mental characteristic is as vital to goalkeeping as anticipation. This simply means the realization of events which are about to occur. Anticipation is directly dependent upon experience, observation, and concentration.

c. *Sound Judgment.*

Once such a sterling individual has been found, the job of teaching her the proper skills remains. These skills include stopping, clearing, lunge stop, aerial balls, rushing, and the penalty bully.

After a two-year period of experimentation, I have discovered that a goalie develops most rapidly by learning first to clear. Instruction should be started by placing numerous hockey balls in a semi-circle about the middle of the striking circle. The goalkeeping prospect is then asked to run out and kick the ball. The position of the weight as she clears must be checked immediately. *The most difficult problem in goalkeeping is the position of the weight.* If a girl's weight remains "back on her heels," she must then be asked to kick the ball and chase it. She may well decide that the coach has lost her senses; she will, however, bring her weight forward. As she progresses in this technique, the use of the toe joint (not toe) for clearing, and the use of both feet should be emphasized.

After this is accomplished, it is good to explain why the weight should be forward. There are many reasons for this: to insure quick movement and recovery; to protect oneself; to avoid dangerous aerial clears into the advancing line; and to produce powerful, directed clears. Although it is unusual to start by teaching "clearing on the fly," it appears to be the most rapid way to bring the weight forward and the best way to instruct a goalie not only to stop a shot, but also to remove the ball from the danger area.

The next area of instruction to be covered should be the art of handling an aerial ball. For many goalkeepers the shot in the air is the most difficult. Start this period of instruction by throwing the ball to the goalie above the pad area. She will soon learn to catch the ball or allow it to rebound from the hand (either is acceptable). It will be wise to pause here to demonstrate the proper technique. The ball should be fielded with the left hand, dropped for the clear, and then cleared with direction. The goalie must be careful not to catch the ball too close to the body because to drop such a catch would cause the ball to fall on the feet or even behind the feet.

Most goalies will do well with a gently thrown ball because they can anticipate the movement and because they are aware that the ball will be in the air. It is wise, at this point, to explain just why and

how the ball can be lofted. The ball is lofted when it is scooped or flicked; when it comes off two sticks or off an improperly positioned defense's stick; from an irregularity in the turf; or when it is undercut. All of these can be demonstrated for the goalie. Once a goalie has handled many aerial balls and has learned to anticipate them, the skill becomes automatic and is actually simpler to perform than those connected with the feet.

Now that the goalkeeper's weight has been brought forward and this technique has been insured by demonstrating how to handle an aerial ball, the skill of stopping should be taught. The two-footed stop is made with the weight forward and knees bent in a "soccer-like" position. The ball should be placed where it can be immediately cleared. In the case of a wide angle shot to the goal, the goalkeeper must learn to stop the ball with a lunge stop (one-footed stop). This should be done by extending the leg, with the largest surface of the pad facing the ball. The weight is still maintained over the feet.

Other than "Why do you play goalie?," one of the most often asked questions is "When should a goalie rush?" The fascinating part of this query is that it cannot be answered with a cut and dried reply. Rather, it is a skill dependent upon the speed of the oncoming forward, the goalie's speed and position, the position of the defense, and the position of the offense. Along with all of these factors, the actual game situation may make a difference. Generally speaking, a goalie should rush whenever she has a "one on one" situation. It is difficult to convince a goalkeeper that she has accomplished her purpose if she rushes out and misses the ball, yet still forces the wide shot; but she has.

To instruct a goalkeeper in the art of rushing, start by having forwards dribble into the pads of the onrushing goalie. As they progress, the forwards can be allowed to perform certain suggested dodges and then finally should be allowed to try their wits at actually eluding the goalie.

Still another skill that a goalie should possess is proficiency in a penalty bully. Nothing is more frightening for the inexperienced goalkeeper than the prospect of a penalty bully; however, if the goalie has had the benefit of good sound instruction and practice in this skill, her chances are immensely improved, and she may even have the upper hand. A goalie must play defensively in a penalty bully situation since she is greatly hampered by her pads, which she must not remove. The goalie should take the bully slowly, breaking the rhythm of the forward, and at the final hit of the sticks should cover the ball as well as possible. Following the forward's move, the goalkeeper should push-pass the ball out of the circle, taking care not to lift her stick from her defensive position. All the horror of a

penalty bully may be alleviated by having the goalkeeper take five penalty bullies per day against *good line players.* All too often the penalty bully is not practiced at all, and if it is, the technique is performed with a handy backfield player or another goalie.

In the final analysis, a goalkeeper can be developed and well on her way with two hours of instruction a day for one solid week. She, herself, can be made responsible for areas of practice. She should (1) make sure her equipment is on correctly and securely; (2) ask forwards to shoot at the edge of the circle when she is first warming up; (3) try to get forwards to shoot from all angles—not just their pet spots; (4) practice five bullies per practice session; and (5) if, during a scrimmage, the ball has not been in the circle too frequently, she should be given additional practice. Along with following these suggestions, a goalie can work individually. She may practice the use of her stick; work against a wall with tennis balls, improving her agility; or dribble hockey balls with first one foot and then the other. All players should assume the responsibility for individual skill practice, and there is no reason why the goalkeeper should be placed in another category.

The goalie can make it most difficult for her opponent if she demonstrates confidence in her skills and tactful control of her defense. Very often a goalie who is peppered with shots will gain confidence as she goes along and will do well. The difficult games are those that contain only three shots for goal. These may very well be three goals if the goalie lacks confidence or concentration. Stopping the *first shot* is the best approach to any game. Nothing can place the goalkeeper more securely on the right foot than this.

Coaching a Varsity Team

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Anyone who likes to work with young people will find coaching a varsity team rewarding and challenging. It is rewarding to have the opportunity to measure the results of one's effort in the weekly competition. Individual players are offered, through competitive play, a chance to improve their own skills and the collective skills of the team–factors that are less evident in either intramurals or playdays. Varsity competition breeds this kind of desire; close followers of sports are familiar with an individual or a team "rising to the occasion." The coach's challenge comes about because of her responsibility to condition, discipline, and develop individual skills, and to create a cohesiveness in the team, enabling it to work hard each week to defeat opponents of equal ability and experience. There is little to be gained in meeting inferior teams. The very life blood of varsity play is dependent upon players meeting those of equal or higher standards.

Philosophy of Coaching

Team members will measure up to whatever standards are set by the coach. High standards will result in self-confidence, pride in accomplishment, self-control, reliability, and team loyalty. Developing a team that takes pride in playing well will result in winning. Once a winning spirit has been established, each new group will attempt to live up to this tradition. The team that is in the best condition, the most disciplined, the most highly skilled, and the most competitive is going to be successful.

Personal Qualifications

Personal qualifications for successful coaching are:

(1) The general ability to be a successful teacher;

(2) A thorough knowledge of the game, its rules and skills;

(3) Playing experience; (However, there are some successful coaches who have gained their skills through reading and observation; these people generally have followed good, high-level hockey, often at an international level.)

(4) A strong, positive personality that relates well with young people; (The coach must be capable of handling each personality to bring out the best.)

(5) The ability to command respect of the players; accomplished by actions, words, and knowledge of the game;

(6) The ability to analyze offensive and defensive strategy, pinpointing weaknesses and strengths that can be utilized in one's own coaching;

(7) The ability to take the drudgery out of practice and make it alive and exciting.

Conditioning

In the early sessions of the season, practices should be planned to prepare the team physically and mentally for the coming season. A good conditioning program will provide the stamina for the last few minutes in each half. Many games are won or lost during these periods. Running is the best all-around conditioning activity for this sport. However, we no longer subscribe to the aimless running of laps around a hockey field. Sprints and jogs, which provide the change of pace necessary for the execution of skills, more closely approach game running. Daily wind sprints of 25, 50, or 75 yards based on time will help each player improve her endurance and speed. Running with frequent change of direction (with or without a ball) will improve footwork. Because hockey is a game requiring a great deal of dexterity with a stick, time spent running while dribbling, driving, passing, and receiving will master skills as well as condition the player.

Practices

Practices which are poorly organized and executed are a waste of time for the coach and the team. Players who are not challenged will lose interest and perform in a careless fashion. Motivation and enthusiasm on the part of the coach are "catching," and players will work harder to improve the basic skills of the game. A well-planned progression of skills and a variety of drills for each practice session will prevent boredom. It is important to use as many balls as possible in all drills to insure that players will not spend time standing in lines. All skills must be taught and practiced before the first game. Attendance at practices must be required of all players since hours and hours of practicing basic skills and scrimmaging are necessary to develop team cohesiveness.

Team discipline is an important aspect of each practice, and rules and regulations must be strictly enforced for all players. All players must be treated equally. Under these conditions the coach and team will make maximum use of each practice session.

It is essential that players learn to think for themselves in order to meet game situations. Many of us stifle individual thought and, in so

doing, produce robot-like teams. We then complain when players or teams cannot cope with a game situation that deviates from the norm. Hockey is far from stereotyped since each play situation presents a new set of forces. The coach controls thinking only so far as her system of coaching of passes, play distribution, covering, marking, and forward line play are concerned. The player who is advanced in experience should be allowed more freedom in thought. Players must use their own initiative in actual games. Many coaches are unable to take their eyes away from the play of the ball to see that the defensive players are shifting to adjust to the next play, or that the halfback is directly behind the ball when a wing has the ball in the alley, or that the far wing is ready to receive a pass. For example, most coaches realize that the fullbacks should not play square; they should not hang back in the circle; they should line up stick against forwards stick on corners; and they should not go to the alley to take a wing when no one is covering for them. However, if the coach is not constantly insisting on these details, her team will become very careless and the level of play will be lowered.

Player Selection

The most difficult aspect of coaching is, perhaps, that of player selection. Players should be placed in positions to insure a well-balanced team. The coach who spreads her strong players over the field will have more success than the coach who concentrates all of her better players on one side of the field. Weaker players will improve more rapidly playing stronger players. It is not a good policy continually to change a player's position. Continual changing provides a player with a superficial knowledge of all positions; however, she will not gain the specific knowledge for any one position. This does not mean that a coach should not change players. A steady forward with good fundamentals but little scoring power will often provide just the fullback the coach has been looking for, or the aggressive halfback may provide the forward line with the needed scoring punch. A novice playing with experienced players and placed on a wing receives an opportunity to obtain a better understanding of the game. The wing position requires less close body and stick maneuvering and provides a vantage point for observation of the offense and defense at work. Having gained game experience, this player may be moved into a position better suited to her particular talents.

In selecting squad members the following qualities should be borne in mind: speed (required in all positions), endurance, aggressiveness, the ability to anticipate, command of stroke, sense of teamplay, and strength.

Once the squad is selected, it is essential to avoid coaching only the highly skilled player. Coach the forwards, halfbacks, fullbacks, and goalkeeper equally. Successful varsity teams are dependent upon a good junior varsity—having players "pushed" by another player is a sure way of getting the best out of both players.

It is the responsibility of the coach to be constantly aware that the game is for the players. A selfish individual can hardly be expected to be an outstanding coach. Unless she considers herself a part of the team, a cohesive organization is impossible. Too often, the coach is an outsider either by choice or because the varsity team is unwilling to accept her as a member.

The coach's reward comes not at the end of a game or even at the end of the season; rather it comes in a word or phrase, long after the varsity association has ended. Players tend to revere or ridicule their varsity coaches in later years; there seems to be no middle road. Reverence and respect for the coach are almost always associated with teams that had winning seasons. How will your varsity coaching experience be evaluated by your former players?

What Is Your "C.Q."?

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The term "I.Q." is a familiar one in the educational world. It is the mark by which one can judge the expected achievement of a student. Would it perhaps be a good idea for those of us who coach hockey to establish a "C.Q."—a coaching quotient, a guide by which we can judge not our expected but our realized achievement? We must pause on occasion to evaluate what we have accomplished. The question becomes, therefore, how to measure our successes and our failures. I believe that there is a very simple answer to this question. All we need do is to step aside and take a good look at our own hockey players. For no matter how hard we try to hide ourselves, our students reflect what we have taught them, and looking at them is like looking in a mirror. It gives us an unparalleled opportunity to see ourselves as others see us.

The positions of coach and teacher have, unfortunately, become separated in our modern physical education parlance. This leads to the conclusion that somehow these two occupations require different skills; in reality, however, the two cannot be separated. A coach who is not a teacher, in the broadest sense of the word, will never be a real coach. Coaching a hockey team requires as much careful preparation, if not more, as teaching a class of beginners the fundamentals of the game. The challenge of the more advanced player, of the need to teach not just define skills which have specific cues and drills, but an understanding of the whole game so that each individual may be able to think for herself and the team on the field—this requires the greatest teaching skill that we can summon.

The "C.Q." Test

1. Do you refer to the hockey team you coach as "my team" or "our team"?

A strange question perhaps, but it is a measure of the relationship between coach and team. One of the most difficult tasks in coaching a hockey team is gathering the courage to let the captain take over control of the team on the field, to put trust in the judgment of inexperienced players, to be a constructive spectator. Behind the assumption that this is what a coach should do lies acceptance of the fact that hockey is a team game, that success lies in spontaneous working together as a unit and in individual initiative. These traits can never be developed unless each forward, each halfback, each

fullback, and the goalkeeeper are taught that the most important thing in any match is to seize the opportunity of the moment and that when an individual does this the rest of the team must instantly adjust. These traits will never be developed unless the attempts to accomplish them, leading to failure as they may, are recognized and praised. Set patterns of play for bullies, corners, rolls-in, or any part of the game do not belong on a hockey field. They may work in practice but when the other team enters the picture they are easily foiled . . . and then what? Robots may be highly skilled technicians, but they can never bridge the gap between a machine and a man—the ability to think. Robots may win a few hockey games because their programmer has more experience than they, but when the programmer is gone of what use are they as individuals?

2. What do you and the teams do during and after a game?

Are you as much in evidence during the game as the players on the field or are you sitting with the other players watching the game and trying to point out to them the good and the bad, thereby helping them to more quickly achieve their greatest desire, to be playing?

Are your players constantly shouting and talking to each other on the field because they hear you from the side lines?

Do you find your players at halftime saying, "If only Suzie had marked as she should, they wouldn't have scored," because your suggestions to them always look backwards, or are they trying to figure out for themselves how to break through the good defense of the other team while you are finding a quiet moment to give Suzie back the confidence she needs to prevent them from scoring again?

Do you wonder why the team suddenly begins to question the umpire's decisions? You certainly do not approve of this, but the team has heard from the players on the side lines at halftime that you are questioning calls and, after all, what you do and say is "gospel truth."

Do your players immediately stop when they have committed an obvious foul and raise their hands (isn't this the essence of good sportsmanship?), forcing the official to blow her whistle when the other team would have gained a much greater advantage from play continuing, or have they been coached to play to the whistle? Does your center forward feel that if the umpire misses a goal which she kicked in that she is playing to the whistle and that this is part of the game, or does she tell the official that the ball was kicked?

Is the after-game atmosphere one of complete joy or gloom depending on the outcome or is there room for "how you or the other team played the game," room for the enjoyment of the refreshment of the sheer physical and mental exhaustion which

comes from giving one's all, room for the fun of getting together with the other team off the field?

Is every game a learning experience to be shared by all or just a mark to be chalked up in the won or lost column?

3. What do your spectators do during a game?

Just as is the team, so are the spectators a mirror of the coach's attitudes. Most hockey spectators are students who are also in some of the coach's classes, or parents and friends of the team. Their hockey education and their game behavior are part of our responsibility as a coach. They should know enough about the game to appreciate good play. Certainly they are a partisan group, but this should not prevent them from applauding the skill of both teams. Field hockey, having been primarily a woman's game in the United States, has escaped many of the problems of the game belonging to the spectators rather than to the players. This is a precious heritage that we do not want to lose. But the effects of the "grandstand coach and umpire" with which our students are indoctrinated have to be carefully eliminated from the time a girl first holds a hockey stick. If our students know that they are expected to be positive and intelligent spectators, that this is part of hockey, they will let their parents, brothers, and boyfriends know it too. And perhaps hockey can thus contribute in a small way to the solution of one of the greatest problems in American sports today.

4. It is the last game of a so far undefeated season for both your team and your opponents. The score is 3-3, all of your goals having been scored by your star right inner. With ten minutes to go, this inner has a goal called back because of advancing. She, responding to the pressure, tells the umpire angrily that she did not kick the ball but the umpire replies very kindly that she felt that it did touch her foot. The inner throws her stick to the ground. You have only a moment to decide what to do. What would it be?

We may not be able to answer that question immediately because there are so many factors involved, but I can practically guarantee that our students could give us our answer without a moment's hesitation. "Hockey players are what their coaches make them."[1]

[1] Sawin, Nancy. "Coaches, Take a Look at Yourself." *The Eagle,* Vol. XXI, No. 4, December 1960. pp. 2-3.

A Guide for Selectors

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From the very beginning of anyone's hockey playing experience, there is a natural instinct to consider the best players in any particular group with which one is connected and with whom one plays. This instinct is more highly developed in some people than in others, and they are the ones who will in later years probably become one of the much criticized breed who strive to select the best possible team at various levels. It is a fascinating occupation, extremely rewarding at times and at others quite disheartening, but the more experience one has the greater the fascination becomes. It is a great mistake to contemplate giving up when you encounter a "bad patch." Results may be disappointing, and derogatory criticism from the general public may pour fourth. This is not the time to "pass the buck." Take stock, look for remedies, and try again.

Levels of Selection

The various levels of selection include school, college, club, county or association, and territory or section. The first of these levels is school and college selection. There is perforce an organizer, a physical educationist in all probability, for the purpose of choosing a school or college team. She will have a committee, possibly her team captain and vice-captain and one other person. Their work covers the period from the beginning of the season to the first match. The tendency of youthful players when selecting others is to allow personal preference to influence their decisions because of an instinctive disinclination to disappoint one's friends. This is the first point of importance—that the personal element must be ruled out.

The second point is that young players, when selecting from their group, can often spot the potential weakness or strength of a player or combination of players with quite a flash of brilliance, so that any organizer should give real thought to any suggestion, however odd or impossible it may appear at first mention. "Out of the mouths of babes . . ." can apply anywhere.

School and college selectors presumably have the chance to watch progress as the weeks pass, and they must realize from the beginning that their responsibility means complete concentration to see if progress and improvement result from their choices and if not, why not?

The second level is club selection. Regular club games should give their team selectors time to assess ability in order to get the best results.

The third level is county or association selection. As we go to a higher standard, methods of selection must obviously vary according to country and prevailing circumstances. For example, there are two possible methods: (1) The selection of a team or number of teams where the choice can be spread over a period of weeks, or (2) the selection of a team or number of teams that must be decided in one or two trials on the same day or spread over two or three days.

Selection for County or Association

Recommendations to a selector for the first method are as follows:

1. See every game and every player as many times as possible in order to assess real form.
2. Give some time to thinking about individuals and combinations.
3. Make sure you study the players you know least well and assess their value correctly. At the other end of this scale, try not to be "previous" with your criticism of the faults you know only too well in others. Do not expect them. It may be that a particular player has at last overcome her besetting sin.
4. Try to decide whether a lack of form is due to a bad day or two a general falling off that is becoming apparent.
5. Choose the players who will be at the peak of their form at the required time. This is not easy!

The second method is more difficult as there is less time for consideration. If a number of players are unknown, real form is much more difficult to judge. For example, there are the players who excel their everyday level of performance when they are on trial and under pressure, and others who do not do themselves justice because of "stage fright" or a lack of real concentration.

In this short-time selection be prepared to make quick and sure decisions. Watch the whole "picture" to get the standard of the game first. Pick out any obviously outstanding players and note those below standard. When watching individual players, their ability, and their combination with others, do not forget in the comparison to take into consideration the standard of their particular opponents.

Look for the player who concentrates from the first whistle to the last and really goes all the time. Of questionable value is the player who makes remarks to a friend on the side line, even if the ball is sixty yards away. You do not always get the complete picture of a player when she is in possession of the ball. Her good or bad points can frequently strike you when you see what she does as the game moves to the far end or far side of the field.

Be quite certain what you expect of your chosen forwards or defense players. Everyone naturally has different ideas as to the best and most efficient methods for any position, but as you watch, look for the *essentials* that every skilled player needs—concentration, anticipation, ball and body control, speed, determination, ability to execute all the strokes with real skill and *at top speed.* To quote a well-known authority, "Hockey is a *running game,*" so speed is essential.

When watching, do not feel that you can only see from one particular point. There is no doubt that a change of viewing position can often provide the answer to a problem. For example, the end-on view of a game will frequently show the weak point in a defense, the gaps that attacking forwards are not using, or the point that a goalkeeper is not covering because of faulty positioning.

Problems That May Arise

After having chosen their teams, the selectors are sometimes faced with the unhappy job of replacing players. If the particular choice has been for two or more matches, the question arises as to whether one bad match means replacement of that player, or should she be given another chance? Although it would be rare, in certain circumstances there might be sufficient reason to keep her on the team. In general, however, I personally would say "No" to the idea of giving the player another chance in a newly selected side.

Another point which so often crops up is the question of changing a player's position. It is impossible to make a definite rule. However, it would be wise to leave the best players in their own positions and change others. The whole object of our efforts as selectors is to produce the eleven players who will make the best whole unit. Unfortunately, it is not always the eleven best players, and any change must be made to this end.

Also at intervals the problem arises of the unorthodox but sometimes brilliant player who is not easy to play with, but is capable occasionally of turning the tide of defeat into success. All too often these spasmodically brilliant players do not pull their weight for the entire seventy minutes of a match. As a selector, I hesitate to neglect such a player; but on the other hand I do feel that anyone who is clever enough to star at intervals should be capable of real concentration between the flashes.

The qualities necessary for a selector are (1) the ability to make decisions; (2) a real knowledge of the game; (3) high standards for playing ability; (4) a completely unbiased and impersonal attitude with all players; (5) the ability to stick to her own decision, but at the same time to understand and to review the point of view of others; (6) time to watch the type of game from which she is going

to select; (7) knowledge of the standard required, and of what the players should be capable; (8) the ability to watch players and not the game; (9) the ability to offer constructive criticism after the faults of the player are pointed out; (10) the willingness to back up her chosen team and give them confidence and encouragement; (11) the ability to listen to criticism and complaints without argument. For a chairman of selectors the essential point is to keep the committee happy as a discussion group with unanimity as an objective. If there is disagreement on certain points, these should be put to a vote.

Individual and Group Practice Drills for Ball Control

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If someone were to ask, "What is the key to success or failure in a hockey match?", the first thing that would come to your mind would be *ball control.* Having played in many international matches, I have found that the ball control of most of the foreign teams surpasses that of most U.S. players. It is therefore every individual player's duty to practice and to develop ball control, to stop the ball on the stick so that an immediate dodge, pass, drive, or dribble can be made in a small area with a minimum amount of effort and a maximum amount of control.

Rainy days present an ideal situation for the development of individual skills. If you have a space problem, half of the gymnasium, the cafeteria, or even a hallway can be utilized. It is not necessary to have an entire team practice at one time. If players wear regular sneakers and tape old socks on their sticks hardwood floors will not be marked. Hard rubber "pudding balls" may be used or if these are not available, a parent or student who knits or crochets can cover a dozer practice balls. Regular hockey balls may also be used, but "pudding balls" seem to work best for indoor practices.

Markers, to be used as goals, or obstacles around which the players can dribble, dodge, or pass are easily made. Indian clubs can be used for this purpose by nailing or screwing on a square base to increase stability. Spraying markers with bright colored paint increases visibility.

There are a few basic rules which should be followed when practicing indoors.

(1) Never drive the ball.

(2) Use push passes or low flicks.

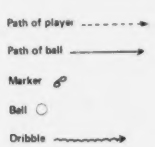
(3) Keep the ball in close contact with the stick at all times. (This may be done by placing the stick against the ball and pushing or by using a series of small taps.)

(4) Keep the feet moving constantly to keep up with the ball.

(5) Keep the right hand about half way down the stick.

(6) Keep the right hand in a dribbling position when using the reverse stick, i.e. rotate the stick in the right hand by the left hand and do not turn the right hand with the stick.

This key will be used to explain the figures for the following drills:



Ball Control Practices

1. Bounce the ball on the flat part of the stick.
2. Toss the ball from the stick and catch it on the stick.
3. Pass the ball from player to player on the stick.

Figure 1. While walking in a straight line the player alternately moves the ball to her left side and then to her right.

Figure 2. In dribbling position, the player pulls the ball to the left while stepping on the right foot; reverses stick and pulls the ball to the right while stepping on the left foot.

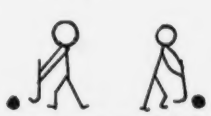


Figure 3. In stride position, player pulls the ball back and forth between the right and left foot. The ball is controlled with a regular stop on the right and a reverse stick stop on the left. The body weight shifts from one foot to the other but the feet do not move.

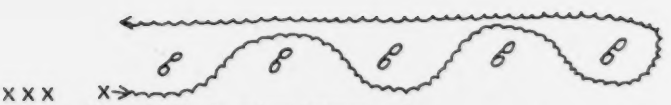


Figure 4. Player dribbles in and out between markers.

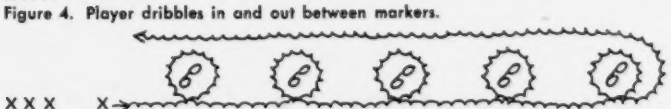


Figure 5. Player dribbles to the marker and circles it going to her left.

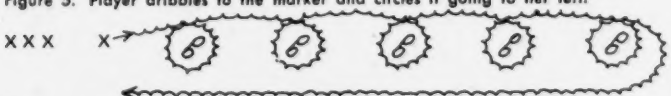


Figure 6. Player dribbles to the marker and circles it going to her right.

Passing Drills

Figure 7. Two players face each other about five yards apart. The ball is pushed toward the left foot of Player A, who stops the ball, pulls it with reverse stick across her body to a point in front of her right foot, and pushes it back toward the left foot of Player B. This drill can also be done with two balls used simultaneously.

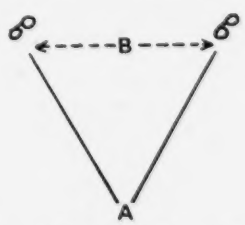


Figure 8. A passes ball toward left marker. B moves to field the ball and passes back to A. A then passes toward the right marker and B fields the ball and returns it to A. Later A should mix up her passes.

Figure 9. A dribbles straight ahead and passes the ball between markers to B. B dribbles and passes between markers to A.

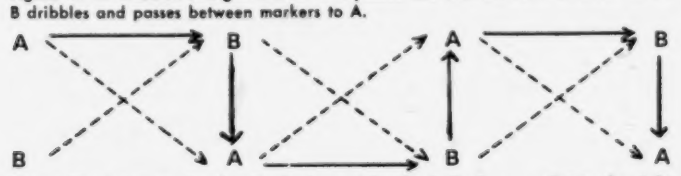


Figure 10. A passes ahead to B who has cut for the ball. B passes flat to the right for A who has cut and taken B's place. A receives the ball and passes straight ahead and B cuts for the ball and passes flat to the left for A. Use the side and alley lines of the field for proper distance.

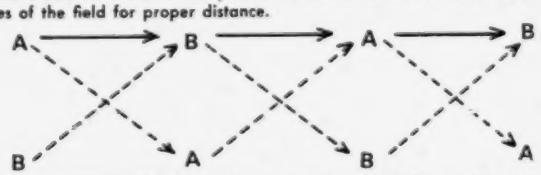


Figure 11. A passes ahead to B who has cut for the ball. A takes B's place. B hits straight ahead and A cuts over for the ball, receives it and passes straight ahead.

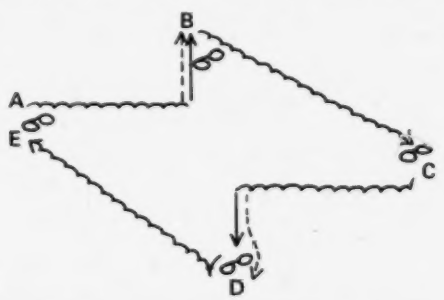


Figure 12. Markers in a diamond shape. 5 players. A dribbles to middle of diamond, passes left to B, follows pass and takes B's place. B dribbles to C,

C dribbles to center of diamond, passes left to D, and takes D's place. D dribbles to E and E dribbles to center and passes left. The same drill can be done going to the right.

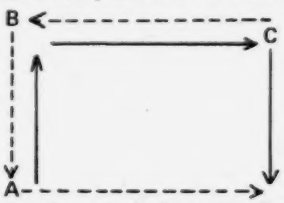


Figure 13. A passes to B and runs to the free space. B passes to C and runs to space A has just created.

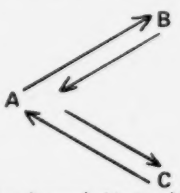


Figure 14. B and C are moving forward side by side about 5 yards apart. A is trailing them as they move. A passes ahead to B and B passes back to her while moving forward. A then passes to C who passes back to her while moving forward.

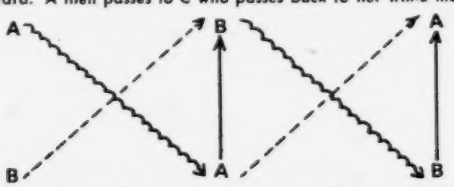


Figure 15. A dribbles to her right while B cuts to her left. A then passes to B who dribbles to her right while A cuts to her left and receives the pass. Use alley and side lines if possible for a guide.

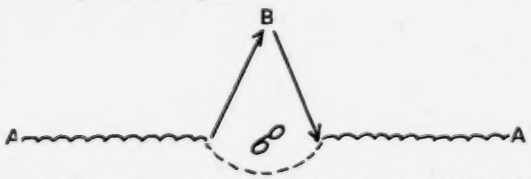


Figure 16. A dribbles to the marker, passes left to B, and cuts behind the marker. B passes back to A who receives the ball and continues dribbling a few steps.

A then goes back the other direction and uses pass to right or reverse stick pass. A and B then change positions.

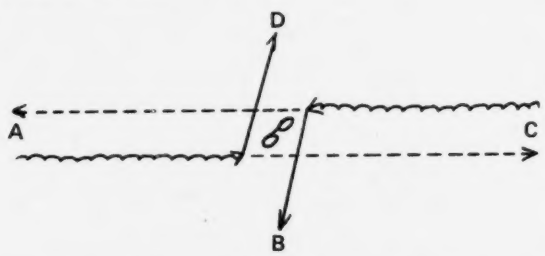


Figure 17. A and C dribble toward marker at same time and A passes to D while C passes to B. A and C have now exchanged places. B and D dribble toward marker, pass left and exchange places. Do the same drill using pass to the right or reverse stick pass to the right.

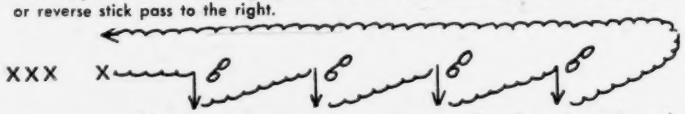


Figure 18. Dribble toward marker and use reverse stick pull to the right and dribble toward next marker.

Figure 19. Dribble toward marker and use pull to the left dodge and continue toward next marker.

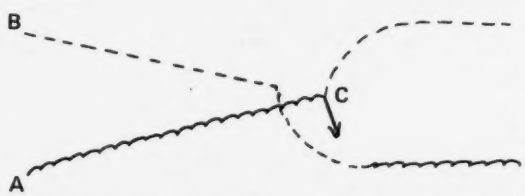


Figure 20. A dribbles toward C with B running beside her. B cuts behind A and receives a reverse stick pass from her.

Shooting Drills

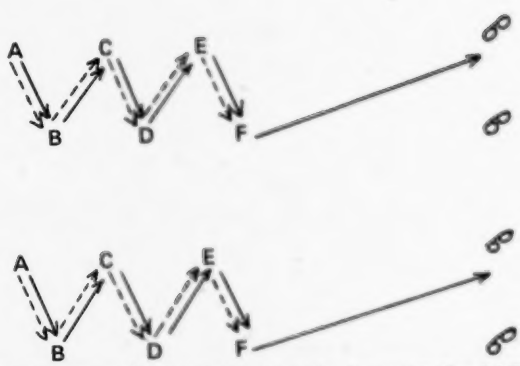


Figure 21. Two groups shooting at separate goals. A passes to B and follows pass. B passes to C and follows pass. Continue until F receives the ball and shoots. The first team to score receives a point.

Figure 22. Have about five players in a straight line about five yards apart. A passes to each one and each in turn passes back to her as she moves toward the goal. A shoots when she receives the pass from the last player.

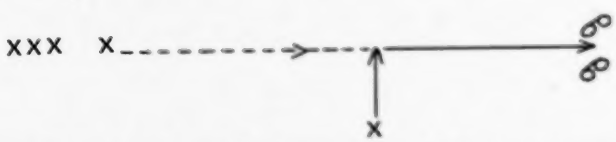


Figure 23. Coach or player rolls ball across goal and each rushing player sweeps the ball into the goal. Do from right and left.

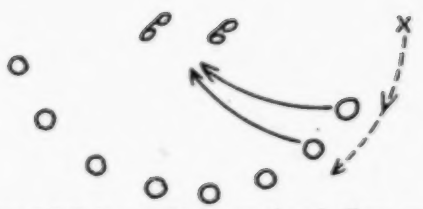


Figure 24. Place 8 balls in a semicircle around goal. Player runs out from the end line and flicks each ball into the goal.

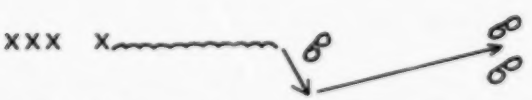


Figure 25. Player dribbles toward the center marker, executes a reverse stick dodge and shoots. Also do with a pull to the left dodge.

Goalie Practice

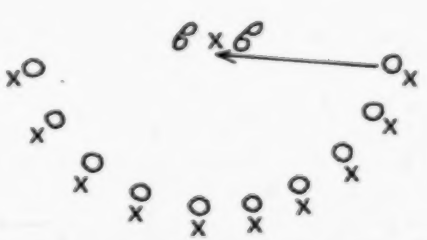


Figure 26. Line up ten players with balls in a semicircle around the goal. Player on the left shoots first and then the player on the right. Keep alternating until the center balls have been hit. Retrieve the balls and start again.

Figure 27. Line up players in a semicircle around the goal. Give each player a number and have her shoot when her number is called.

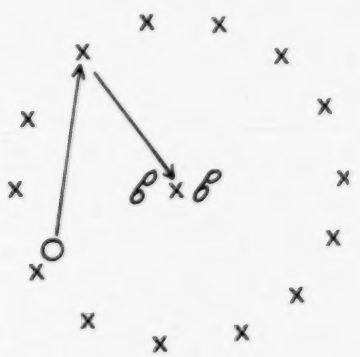


Figure 28. Players surround the goalie who is between two markers. The players around the circle pass the ball to each other or shoot for goal from any side or angle.

Once the basic elements of hockey have been taught these drills can be used to polish up skills. It is hoped that they will add to the variety of techniques already used to build up the interest and ability level of your players.

Clues for Strengthening Team Play

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On any given team, the players will have varying degrees of knowledge and understanding about technique, skill execution, and performance of tactics. The value of combination cannot be overestimated—matches are won by good teamwork.

The first point in strengthening team play is to convince all team members that the object of the game is to score goals. A team that has the will to win usually plays better than one that is satisfied with losing by a little.

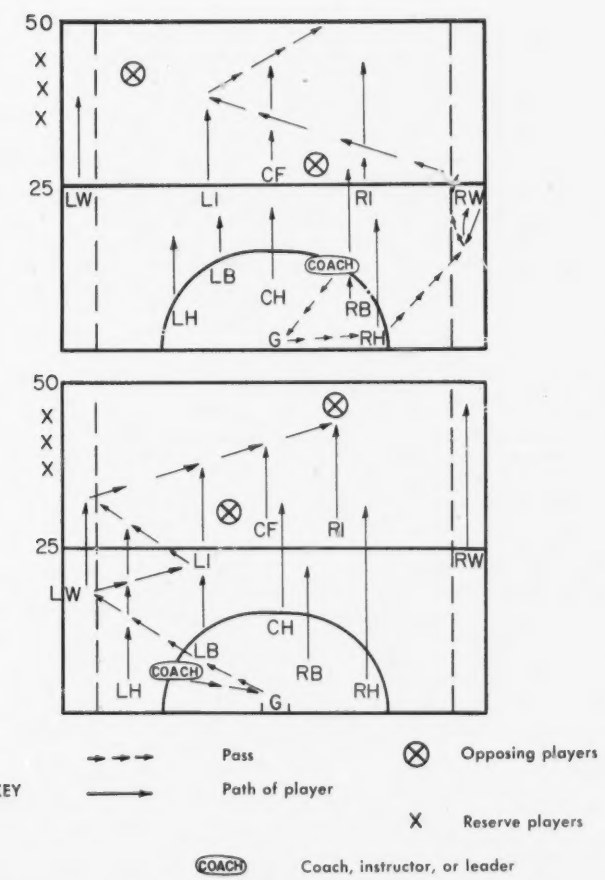
The second point is that forwards and defense should be made to understand the duties and difficulties of each position. Players should realize beyond a doubt that on attack they must find the openings or unmarked players, and that on defense they must clear quickly and gain ground with the appropriate type of passes. Every movement of the defense, whether a tackle, interception, or clearance, should be the beginning of an attack. The forwards must realize they share a responsibility in defense play. They must comprehend the effectiveness of tackling back and going back to help when necessary.

Players have an attachment for their favorite position, but unless they acquire a feeling, awareness, and understanding of all other positions, they are lacking as a complete team player. To help players acquire this feeling they must play different positions—the forwards should play defense and vice-versa. Only then will the *whole* team comprehend the defense system used, the creating and using of spaces and the value of backing up and covering. Among the countless reasons for recommending this procedure is that each player learns to appreciate what is encountered in a position other than her own.

By far the best practice for strengthening team play is that devised by Jackie Westervelt, manager of the 1963 United States Conference Team.

System for Strengthening Team Play

Station one entire team on the field in the positions each would take just as an opponent is about to shoot for goal. Place two opponents on the field in strategic positions. With a handful of balls, the coach stations herself just outside the striking circle out of the defense's way, anywhere where a ball can be rolled or hit hard to the goalkeeper (replacing an actual shot at goal). This starts the practice. See diagrams for possible set-ups.



The goalie moves to block the shot, controls it, and kicks a strong clear to any one of her defense or to an open space. All defense players must be positioned to receive the clear from the goalie. The player receiving the clear must control the ball and give a hard pass immediately to one of her fowards. The forward must be turned in

the correct receiving position. She meets the pass, controls the ball on her stick, dribbles and passes, or passes immediately to another forward. As soon as the defense has hit the ball hard out of the circle, the whole team moves as an attacking unit. The forwards use the full width of the field, playing as a line and using all types of passes to avoid the two opponents. The halfbacks must back up no more than five yards behind the forwards, and the fullbacks move in covering positions, one up and one back. The forwards continue to pass the ball down the field until the coach ends the play by a loud blast on the whistle. At this whistle, all team members, pretending to have lost the ball, go on the defense, trying to recover and get back in position as quickly as possible to prevent another opponent's shot. The defense players recover positions to receive the goalie's clear and the forwards are at the 25-yard line *or* nearer the circle, ready to receive a hard pass from the defense. A reserve player supplies the coach with balls and clears the balls off the field at each whistle. The whole procedure is repeated immediately by the coach, who starts the play with another shot at the goal.

A good variation is to blow one whistle when a forward's pass to another forward is faulty or when a forward fumbles. The forwards then leave the ball and spurt ahead and the halfback backing up the line controls the ball and passes it ahead to any forward. A double whistle would end the play and mean recovery.

This practice keeps everyone moving and occupied at all times. It is good to have many reserve players on hand and to substitute freely since this is an exhausting practice. Stickwork, footwork, control, speed in getting off the mark and in recovery, correct positioning for clears or passes, and alertness are brought out. As with all effective practices, the coach must insist that players position themselves properly to minimize fouls and help strengthen team play.

Try this practice but first be in condition! It will show you if your team can function as a complete unit.

The Development of Forward Play

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Bryn Mawr, Pa.

Whether teaching hockey to beginners or selecting high school teams, the choosing of the right girl for the right position on the field is as subtle as casting actors for a play. When choosing players for forward positions, there are several important qualities which a coach should look for in her prospective candidate.

Physically a potential forward should be speedy, with quick acceleration, and yet have body balance and control with neat footwork. She should be an attacking type of player, armed with a certain aggressiveness and the desire to score goals.

She should be able to take the initiative and if necessary be willing to attempt to score alone and unaided. Yet she should be able to combine with her teammates to produce a total aggression.

She must not, however, become a prima donna only interested in scoring. Instead she should always be ready to turn around and help her defense by tackling back.

She needs the type of temperament which rises to the occasion, allowing her to pass accurately or score goals under the pressure of a large audience or an important game. There are very few perfect opportunities to score in a game and these occasions must be fully exploited and utilized when they do occur.

What To Teach Forwards

The teaching of forward play is one of the most difficult assignments in hockey. Defense play is comparatively cut and dried with coherent movements of the six players to form the strongest barrier possible. Forward play is so intangible. If a stereotyped attack is formed, it is likely to be nullified by a stereotyped defense system. So it is the surprise element, the individual spark, and the quick and unusual reaction of forward players which will break through the defensive wall.

Thus it is important to have forward players with initiative and a sense of adventure. Yet unusual attacks are not successful unless a player has perfect footwork and stickwork to control the ball closely in any given situation.

Good footwork and body control may be acquired in many ways. It should start in kindergarten and continue in the elementary grades through a variety of media like national and modern dancing, matwork, and gymnastic agilities. If you look at many teenage girls

today, very few run correctly or well, let alone gracefully. I am convinced that this is due to lack of training when young. In any high school, hockey practice time must, therefore, be given to running activities to build up stamina, and to quick sprints changing direction to the whistle frequently and suddenly but with body control.

As important as good footwork, excellent stickwork is an essential. I am not going to elaborate with a series of drills to improve stickwork. Coaches will inspire their girls to stickwork practices in a variety of different ways most suited to the ability and type of needs of their hockey groups. But particular emphasis must be given in forward play to the receiving of passes from all directions so that the ball may be controlled close to the stick, often when moving at top speed. Attention should be given to accurate sympathetic passing and, as a player becomes more experienced, she must try to camouflage her thoughts so that every move is not telegraphed to the opposition.

A forward player must acquire a variety of deceptive dodges and not only know when to use them but how to change the pace of her speed with her dodge. And, of course, a forward must acquire an accurate and powerful drive for goal, which can be produced with the smallest possible backswing in the quickest possible time.

Knowledge of the Whole Game Needed

All these stickwork requirements are well known to the more experienced coach, who realizes that they may only be achieved with constant practice, game experience, and natural coordination. Good controlled stickwork and footwork are perhaps 75 percent of the answer to good forward play. These qualities must, however, be combined with a general intelligent overall understanding of the game of hockey. I am constantly amazed to hear high school varsity players admit that they do not understand when to put a "through" or "triangular" pass to a teammate or when to place a "flat" pass. I find the simplest way to explain this is to use an inner and wing and the opposing halfback to show that if the wing is marked man-to-man, the pass must be placed in the space behind the halfback. If the space is marked by the halfback, then a flat pass should be sent by the inner to the wing to draw the half towards her.

I believe that this is one of the keys to high school coaching. If a team understands the constructive placing of passes, it is beginning to play the game with intelligence.

This understanding may be supplemented in different ways. I meet forwards who have never realized that there are two ways of dribbling: (a) keeping the ball close to the stick, and (b) a loose open

dribble to match a long-strided run in open terrain when the player is not hounded by opponents.

It is hard for forwards to realize when the ball should be passed and when the ball should be kept in an effort to entice an opponent or have a solo swing effort. So often coaches teaching inexperienced players are so concerned with team unity that they quite inadvertently quench the individual fire within a player. A happy balance must be kept. Try to show players when to pass, but encourage them at the right opportunity to use some individual creativeness. And do not condemn a player if an individual idea does not work, rather encourage her to practice it and think of new ideas.

Try to experiment with phases of the game which are often neglected, such as rolls-in and corner play. Let your players discuss ideas and put them into practice.

Try, too, as a coach, not to form too set an approach to the game. Remember that reverse stickwork skills are more easily acquired when taught to younger players in their everyday practice times than when they are mature players.

Try to impress upon your forwards that forward play may be likened to the game of "Steal the Bacon." The first person to reach the bacon claims it. In hockey, the first person to reach the ball has possession of it. So teach your players to *move to meet the ball.* Often moving to meet the ball will take a player into another player's position. Do not condemn her zest. Instead show the rest of the line how to adjust to this changing position.

Above all, try to help players feel what it is like to play at top speed. Many forwards literally run at half speed on the field.

In Summary

Select players with the most ingredients for forward play. Mold and train them to obtain good footwork, stickwork, and teamwork, yet foster initiative and individual play, coupled with an intelligent understanding and approach to the game. Help them to strive for speed and aggressiveness, while always stressing clean and honest play. Finally, remember that forward players of any standard produce their finest play on good smooth fields with *short* grass!

Defense Play in the Circle

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University of Newcastle upon Tyne
Scotland

The basis of good defensive play, whether in midfield or in the circle, depends to a very great extent on positioning. Each player in the defense has a definite role to play and is primarily responsible for marking one of the attacking forwards.

The "covering" pattern which has evolved from the "English" game (as opposed to the Continental type of play) makes use of the extra defender covering the spaces behind the play, yet ready to move into action to help another defender who has failed to stop an attacking movement. Positioning and covering in defense are illustrated in Figure 1.

Assuming the RW is in possession, the LH is attempting to tackle while the LB moves towards the RI to cut off any square pass. The RB moves over to cover the LB and the space in front of the forwards, while the RH covers over in front of the LI. In this position she is able to cut off any pass meant for the LI or even the LW. The LW, being the player the farthest away from the ball, can at this stage be left unmarked. At the moment, she is the least dangerous of the forwards. The CH is doing what all good CH's must do, marking the opposing CF, and when defending she must never be tempted to tackle anyone else.

Should the ball, however, move across the field to the LW, the defensive pattern will change–pivoting on the CH position, as shown in Figure 2. The RH moves out to tackle the wing, the RB moves towards the LI, and the LB runs back to a covering position. The LH will come across to mark the RI.

A variation on this move would be for the RB to move out to the wing and the RH to remain with the inner. This will depend upon the speed of the back and the ultimate position of the ball. Deviations from the normal defensive pattern can confuse the opposition, but understanding must be complete between the defense players involved.

In the circle this defense system is just as effective, although the players will be very much closer together and not spread out over the whole width of the field. To illustrate the marking and covering in the circle, Figure 3 shows the simplest set-up for a corner hit, taken by the LW five yeards in from the corner flag.

The diagram shows three defense players (RB, CH, and LH) moving out quickly to mark three of the attacking forwards (LI, CF, and RI). The LB takes up a covering position in front of the

Figure 1

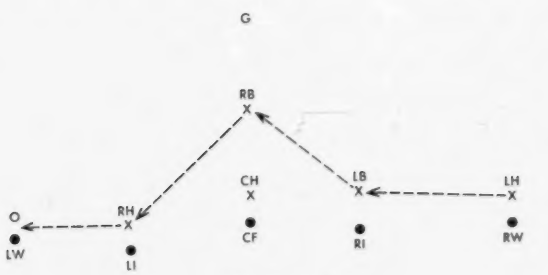

Figure 2

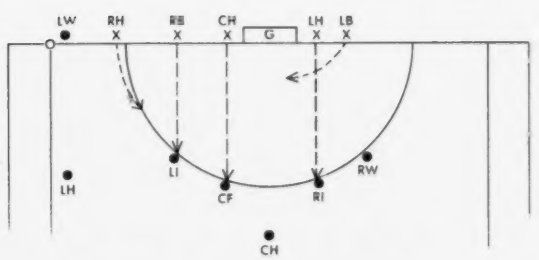

Figure 3

goalkeeper, but must not unsight her, and the RH is covering the space through to the LW. The wing, after taking the hit, can move onside ready to receive a pass from her inner. An alternate system of marking would allow the RH to tackle the LI while the RB covers her and watches the wing. Similarly, on the left side of the defense, the LB and LH may interchange. The principle is first to stop the shot at goal by the three forwards nearest the ball, and if this fails, for the backs or goalkeeper to intercept the ball. It is essential that each defense player carries out the task allotted to her, and attempts nothing else; otherwise, in the cramped space of the circle, confusion will result.

Should the LW attempt a pass, or the ball find its way over to the unmarked RW, either the LB or LH must be alert to cover this danger and move out quickly to tackle the wing. The question of who rushes out at corners can be agreed upon by the wing halfs and backs. The important thing is to know who is doing what before the corner is taken.

With the penalty corner, the defense is drawn more tightly into the circle (Figure 4), and again the wing halfs and backs combine, one to mark, the other to cover.

This defensive marking system presupposes that the defense will be opposed by only four effective scoring forwards, and intelligent forwards will sometimes try to baffle the defense by varying their tactics, as follows:

1. *Forwards may interchange . . . the edge of the circle just before the hit is taken.* The CH is used to seeing the CF standing opposite her at a corner, but if the RW suddenly appears in this position, the CH will be uncertain whom to mark. An uncertain defense is a weak defense, and good forwards will make the most of their changes. To avoid confusion, it is better for the defense players to mark a position rather than an individual player.

2. *An extra player may move onto the edge of the circle.* It is common for one or even two of the halves joining the forwards to have a shot at goal. Whether they receive the ball does not matter; the extra player will upset the defense marking plans, and there will be a "free" person in a shooting position. Even a back, if she possesses a hard shot, can move upfield in an attempt by the attacking team to gain the initiative. In a situation like this the defense must be quick to out-think the attackers and make up their minds quickly how they can combat this new move. Prematch tactics and knowledge of the opposition's type of play can help here.

3. *The person taking the corner hit may use a wing half who is standing well outside the circle in an attempt to change the direction in which the ball enters the circle* (Figure 5). The defense will be expecting the ball to cross the circle passing between themselves and

the forwards. Instead it is passed across the back of the circle away from the defense. A quick change of direction can catch the defense going the wrong way.

There is no reason why the defense themselves should not interchange at corners. If the attacking team consistently uses one forward to shoot at goal, the defense could put their speediest player against this forward in an attempt to block the shot. This could be important when playing on a field with a 16-yard circle instead of the usual 15-yard. With the bigger circle, if the corner hit is taken quickly it is almost impossible for the average defense player to rush out and tackle the forward before the shot at goal is taken.

Figure 6 illustrates how the Continental teams organize their defense at corners. The three halfs rush out to try to intercept the shot, while the backs remain on the goal line, with the goalkeeper standing forward in front of the goal. Should the halfs fail to intercept the shot, the goal line is very effectively blocked by the other three players. It will take a perfect shot at goal to penetrate this intensive blocking. Even if the ball strikes the feet of one of the backs, it would be a penalty bully and not a goal, and backs have been known to win penalty bullies!

Penalty bullies and goalkeepers are inevitably linked together, but it must be remembered that any defense player who, in the opinion of the umpire, has deliberately fouled in the circle or stopped a certain goal by fouling can be called upon to take the bully. So practice!

Little has been said so far about the role of the goalkeeper within the defensive system. Unsighting the goalkeeper is probably the commonest fault in an inexperienced defense, but a silent keeper must share part of the blame.

Some goalkeepers prefer to come out from their goal line to intercept a pass across the circle or to stop a forward shooting. In a case like this the covering half or back will position herself on the goal line until the danger has passed. Most of the Continental keepers play well out, and when under pressure, both backs may be behind her in a position similar to that taken up for a corner. The LH can often be the last critical line of defense because she has the whole goal line on her stick side, and a last minute lunge across the goal may prevent a likely score.

Although emphasis has been put on the defensive pattern adopted at corners, similar tactics will develop when any attack is approaching the circle. A pass from the wing into the circle will again see the defense moving back to take up their covering positions, but if the movement towards the goal has been a swift one, a defense player may have been left behind. The covering defender, at this stage, should never be tempted to move upfield and should never attempt

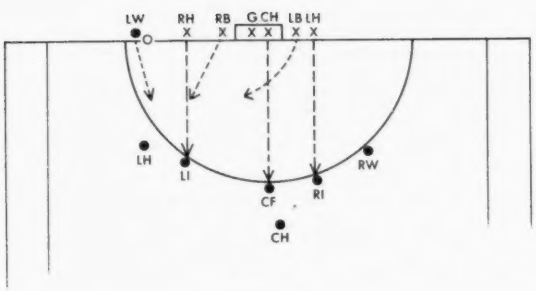

Figure 4

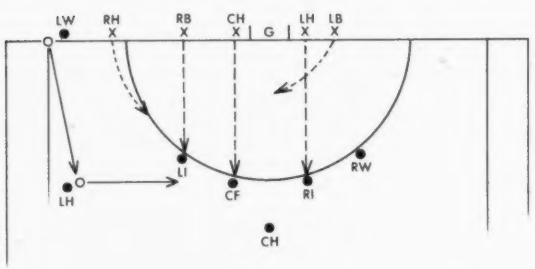

Figure 5

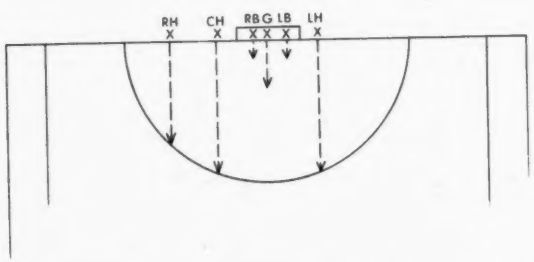

Figure 6

to dispossess the breakaway forward. It is far better to wait until the attacker approaches the circle as this allows the defense to rush back and regroup in and near the circle. The forwards are at their most dangerous at the edge of the circle; this is the position from which they can score, and where the defense marking must be tight and effective.

No attempt can be made to assess all the various situations that will confront a defense in the circle; this will come only with experience. A great deal depends upon the opposition tactics, and it is safe to say that the positioning of the defense at any time, other than those in close contact with the ball, will be determined by the positioning of the attackers.

One final point to remember: once a team gains possession of the ball it becomes the attack. Even the goalkeeper can set up a counterattack once the ball is at her feet. Similarly the other defenders in the circle can, with a well directed pass to a free colleague, begin an attacking movement. When under pressure, each defense player should know who is unmarked and ready to receive a pass should the opportunity arise for an attack to be started. This does not mean that the defense must look for free players up field. A pass forward out of the circle could be intercepted, whereas a square pass to an unmarked half just outside the circle could be more effective. Although we have not yet reached the stage of passing back to the goalkeeper, as in the game of soccer, there is no reason why it should not be done.

Defense players must not get a defensive complex; only by attacking can goals be scored.

Field Hockey Backboard Test

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The number of existing tests using a backboard test as one of the items in a battery or as a single test item indicates that researchers are cognizant of the fact that such a test will measure certain elements of sport skill. Backboard tests have been devised for measuring a player's skill in badminton, basketball, handball, soccer, softball, speedball, table tennis, tennis, and volleyball.

The skill test described below was developed to provide a test that meets the criteria of a good skill test with special concern for administrative feasibility. This backboard test (1) does not require special equipment, (2) offers a consistent surface for all players, (3) involves only one performer, (4) is easily and quickly administered, and (5) is an excellent practice device.

Testing Area

An area approximately 15 feet wide and 4 feet high with a hard, smooth wall surface is needed. The floor space from the wall to the back of the testing area is 20 feet.

Equipment

1. One hockey stick per player, three Chingford hockey balls per testing station, stopwatch, scorecards, and pencils.
2. Markings:
   (a) Two targets, 36 inches wide and 36 inches high on the backboard (hard, smooth wall). The bottoms of the targets are even with the floor, and the targets are 12 inches apart.
   (b) A restraining line, 11 feet long, parallel to and 8 feet from the backboard.
   (c) A mark that is 20 feet from the backboard and parallel to the area between the two targets for placement of the extra balls.

Test

The player being tested places a hockey ball in position ready to hit from behind the restraining line. At the signal, *Ready, Go!* the player hits the ball into one of the two square targets. Either the right or the left target may be hit first. The ball will rebound from the wall. The player than hits the ball into the other target, and continues to hit the ball into the targets, alternately. (If the player hits into the left target first, then the second hit should be into the

right target, the third hit into the left target, and so forth. If the player hits first into the right target, then the second hit should be into the left target, the third hit into the right target, etc.)

If the ball does not hit the "aimed at" target, the player should not aim at the same target again but continue on to the other target. (For example, if the ball does not enter the left target when it should, the next hit should be aimed at the right target.)

If the player loses complete control of the ball, she may take another ball (which is placed behind her, 20 feet from the backboard) and continue on with the test.

A hit will not be counted if–

1. The ball hits outside the boundaries of the appropriate target. (The balls must hit within the target; balls hitting on the lines of the target do not count.)
2. The ball is hit from in front of the restraining line. (A player may run in front of the restraining line to retrieve a ball.)

Scoring

The test consists of six trials. The score for one trial is the number of times the ball hits the appropriate target in 30 seconds. The final score is the sum of the three best trials.

Players may be divided into groups of four at a testing station. Each player takes the first trial and when all four have completed the first trial, then each takes the second trial, and so forth. This allows the player a rest between trials. Also, this way the second player can score for the first player, the third player scores for the second player, etc. Each player should be permitted a short practice period not to exceed 30 seconds before taking the test.

Instructions To Be Read to the Players

The object of this skill test is to determine how many times you can hit the ball into the appropriate target on the backboard in 30 seconds. The more hits you can make, the better your score will be. You will be given six trials, and your final score is the sum of the three best trials.

Note the two square targets on the backboard. There is a restraining line eight feet from the wall. Stand behind the restraining line with the ball in position to be hit. On the signal to start, hit the ball into one of the targets (example, right target). The ball will rebound from the wall. Next, hit it into the other target (example, left target). Continue hitting the ball into the targets alternately (example, left target, right target, left target, right target). If the ball does not go into the "aimed at" target, do not aim at that target again but continue on to the other target.

To count as a good hit, the ball must be struck from behind the restraining line and must hit the proper target. Any ball hitting on the lines marking the areas of the targets is not in the target.

You may run in front of the restraining line to retrieve a ball, but the ball must be struck from behind the restraining line to be considered a good hit.

If you lose control of the ball you are hitting, take another ball (which is behind you, 20 feet from the wall) and continue with the test. You are limited to two extra balls during each trial.

Your score is the number of times the ball hits the proper targets in 30 seconds. The second player counts the number of hits the first player makes and records it on that player's card. The third player will score for the second player, and so forth. As you score, remember that balls hit from in front of the restraining line do not count. Also, balls hitting on the lines of the targets do not count.

You are permitted a warm-up practice period, which the first player should begin now.

Comments

This test was administered to 228 subjects in 1961. The subjects were college women in the field hockey classes and the members of the intercollegiate field hockey teams at Earlham College in Richmond, Indiana; Ohio Wesleyan University in Delaware, Ohio; and Wittenberg University in Springfield, Ohio. The mean score of the Backboard Test for the total sample was 26. (A mean score of approximately 35 was obtained when the test was administered to sectional team players attending a national tournament.)

As a result of applying certain statistical procedures to the data collected on the 228 subjects, a reliability coefficient of .81 and an objectivity coefficient of .99 were obtained for the Backboard Test. The results obtained from an analysis of variance of the data collected indicated that the Backboard Test did discriminate between the poor, average, and good players.

It is suggested that teachers and coaches interested in using the Backboard Test establish norms for their own situations.

Have Stick—Will Travel

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The jet age has changed the whole concept of international hockey. Strange as it may seem, more international than intersectional games are now played by Americans. It is not unusual for Americans to know more players on teams from England, South Africa, Jamaica, or Australia then they know on other sectional teams in this country.

The first American team to be bitten by the travel bug sailed for England in 1921. Not to be discouraged by lopsided scores and few victories, the USFHA decided to send the first representative U.S. team abroad in 1924. These pioneers are responsible for having opened the competitive scope of hockey far beyond the continental limits of the U.S.A. Since this first venture in 1924, 13 United States teams have traveled abroad. With hockey sticks and goalie pads to confuse customs officials, they have toured Great Britain, Ireland, Europe, Australia, New Zealand, South Africa, British Guiana, and Jamaica.

Not all hockey traffic was outbound. It was obvious that hospitality received abroad should be repaid. It was also clear that the standard of play in America would greatly benefit from the visits of the more knowledgeable and more experienced foreigners. In 1925 a team from Ireland was invited to tour in the U.S.A. The pattern of inviting a team every three or four years seems to have been established because Ireland was followed by England in 1928 and Scotland in 1931. More than 20 teams have now toured this country, each contributing to the growth of hockey and to improvement in the level of play in our several sections.

The travel boom that has taken place in the 20 years following World War II has had its effect on international hockey. Travel time has been reduced from weeks on shipboard to just hours by plane. The cost of air travel has been reduced by gimmicks such as the 21-day ticket. Hockey players were quick to realize that times had changed and that touring teams were no longer a dream restricted to a few fortunate players. Since 1948, 14 teams have packed their bags, applied for passports, had smallpox vaccinations, and set forth on tours.

Touring teams do more than play hockey. They are tourists endowed with a strong bond with their hostesses. The scores of games are forgotten in time, but the friendships made last through the years. It is only natural that the returning members of a touring

team look forward to the day when they can return the hospitality and have the pleasure of seeing their hockey friends come to the United States. Since 1946, eight teams have been invited to tour this country and the 16 teams which attended the 1963 International Conference at Goucher College bring the total of visiting teams to 24 teams in 20 years. The travel bug is contagious and once-bitten players are ready to go again. No matter where the tour is headed, players who had the experience of a previous tour are the first to apply.

In 1950, Merestead Hockey Camp broke the traditional hold of the USFHA and sent a team to tour the Western Counties of England. Actually, there were no policies against such a tour; rather, no one had ever taken the initiative. With Anne Townsend and May Fogg at the helm, the dream of such a tour became a reality. Naturally Merestead wished to return the hospitality and a team from the west of England visited this country in 1951. Strangely, even with the great success of the Merestead tour as a guide, no other group or association took the initiative until 1963 when North Jersey visited Bermuda. Possibly as a result of the increased interest stimulated by the 1963 International Conference and Tours, other teams are now on the move. Penn Valley Association sent a team to Jamaica in 1964, and the Pacific Southwest Section sent a team to Australia and New Zealand in 1965. Not to be left out, Detroit planned to visit Trinidad in the summer of 1966; Jamaica returned in the fall of 1966; and United States players attended the International Conference in Germany in 1967.

The USFHA now encourages associations and sections with their tour plans. Guidelines have been established to help organize such tours and to ensure that the teams realize they are representatives of the USFHA and of the United States as well. With today's reductions in travel time and cost, more hockey associations and sections should share in the truly memorable experiences of entertaining foreign teams and of visiting those teams abroad.

Foreign Teams Which Toured the United States

1925	Ireland	1954	Ireland
1928	England	1957	Wales
1931	Scotland	1961	England
1936	IFWHA Conference (6 teams)	1963	IFWHA Conference (16 teams)
1947	England	1965	GBITT
1951	Scotland	1966	Jamaica

United States Teams Which Toured Abroad

1924	To Great Britain	1955	To England
1933	To Europe (IFWHA Conference – Copenhagen)	1956	To Australia and New Zealand (IFWHA Conference–Sydney)
1948	To Great Britain and Holland	1958	To South Africa
1950	To South Africa (IFWHA Conference – Johannesburg)	1959	To Europe (IFWHA Conference – Amsterdam)
1953	To Great Britain and Ireland (IFWHA Conference – Folkestone)	1962	To Great Britain and Denmark
		1965	To Jamaica

Non-United States Teams Which Toured Abroad

1950	Merestead to Great Britain and Holland	1965	Pacific Southwest to Australia and New Zealand
1963	North Jersey to Bermuda	1966	Detroit to Trinidad
1964	Penn Valley to Jamaica		

The 1963 International Conference Matches

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Expressing some of my personal observations and opinions formed while participating in the 1963 Conference, this article is a description developed from the interrelated views of player, spectator, and coach. The basic impressions were derived from conference matches and in some instances, these were enlarged, modified, or supported by postconference games.

The following is a list of match results.

SATURDAY, SEPTEMBER 7

USA-0	Germany-0	Netherlands-2	Scotland-0
New Zealand-3	Wales-0	France-1	Jamaica-1
Trinidad-4	Switzerland-0	England-1	South Africa-1
Australia-3	Canada-0	Ireland-3	Argentina-0

SUNDAY, SEPTEMBER 8

Australia-4	Ireland-0	Int. Wanderers-7	Trinidad-0
Netherlands-3	USA-2	Argentina-0	France-0

MONDAY, SEPTEMBER 9

Wales-4	Canada-0	Scotland-7	Switzerland-0
New Zealand-3	England-2	Jamaica-1	Int. Wanderers-0
South Africa-2	Germany-0		

THURSDAY, SEPTEMBER 12

Wales-4	Argentina-1	USA-6	Jamaica-1
Trinidad-2	France-0	Reserves "A"-4	Switzerland-1
England-2	Netherlands-1	South Africa-1	Scotland-0
Australia-2	Germany-1	New Zealand-3	Ireland-0
Canada-0	Int. Wanderers-0		

SATURDAY, SEPTEMBER 14

Germany-2	Ireland-0	Scotland-4	Jamaica-0
Int. Wanderers-3	Argentina-0	Netherlands-3	Canada-0
England-3	Australia-0	New Zealand-5	France-1
USA-1	South Africa-0	Wales-3	Trinidad-0

SUNDAY, SEPTEMBER 15

Canada-1	Switzerland-1	Germany-1	Argentina-0
Australia-1	USA-0	Ireland-1	France-0

MONDAY, SEPTEMBER 16

Int.Wanderers-2	Wales-1	Jamaica-1	Switzerland-0
New Zealand-2	Scotland-0	England-7	
South Africa-2	Netherlands-0		

WEDNESDAY, SEPTEMBER 18

Netherlands-2	Jamaica-0	Germany-1	Wales-0
South Africa-4	Ireland-1	Int.Wanderers-2	Reserves "B"-1
Argentina-1	Trinidad-1	New Zealand-6	Switzerland-0
Australia-1	Scotland-0	France-2	Canada-2
England-0	USA-0		

As indicated, New Zealand was the only undefeated team. The fact that it did not play more of the top teams was a disappointment to many spectators and players.

With an increasing number of good teams competing in the Conference it seems expedient to adopt a system of scheduling that will permit an unexpectedly strong team to compete with its peers. The tournament could be divided into pre-tour and post-tour matches, with the first-half games scheduled on the basis of each team's previous international performance and the pairing of teams for the final games based on the results of the first-half and tour games.

Such a division would provide a stimulating commencement for the tours and a suitable climax to the entire program. If the pre-tour and post-tour matches were held in different sections of the country, more people would have the opportunity to see tournament games. Interest would develop as the conference and tour progressed, and this would be favorably reflected in the attendance at the final matches.

PLAY

The discussion of conference play will here be confined to those techniques and tactics which by virtue of their effectiveness or overwhelming use made them stand out. I will not attempt to enumerate styles of play. In most cases the differences manifested in actual play were due more to differences in skill, experience, and competition rather than to divergence in basic theory and tactics. There were interesting exceptions, however, and these will be mentioned.

Techniques and Tactics

The most studied and talked about technique was the *reverse stick.* Its skillful selective use by the advanced player has been partially responsible for the shrinking of "through" spaces. At the same time it has increased the potential of the attack. The extended reach of defense players who use it must be considered in attempting to pass beyond them. It presents an equally difficult problem to a defense who is trying to contain a forward. During the conference it was beautifully used as a variable passing, scoring, and dodging technique. The defense players who used it accurately found it a valuable tool to increase their effective range. It was, however, frequently misused and overused, with the results of heavy fouling

Foul resulting from improper use of reverse stick.

and muddled play. Therefore, since the reverse stick technique is here to stay, I suggest that it be taught and practiced as an advanced technique, after basic speed, footwork, and strokes have been mastered.

The *bullet pass* or extremely hard drive acrossfield or upfield is a combination of technique, tactic, and desperation. The constantly shifting and shrinking spaces available for passing must be used quickly before they disappear, and the bullet pass is one of the methods of accomplishing this.

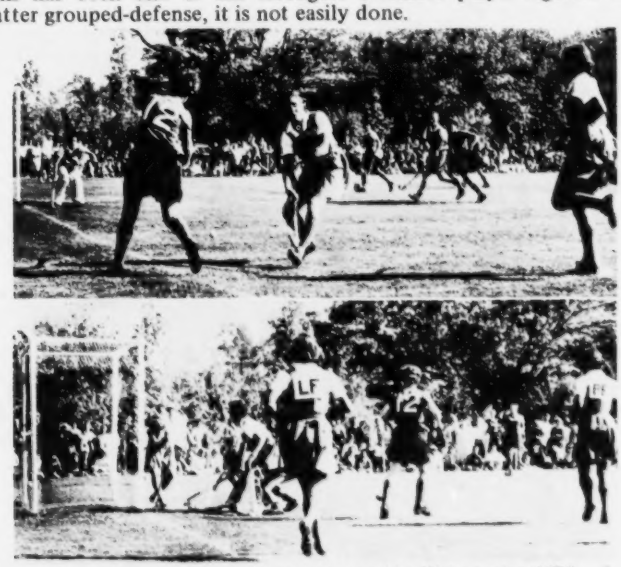
All photographs in this article were taken and developed by Miss Pepper.

Contributing to the increased pace of play was the immediate and continual harassment of the player with the ball, until she lost or passed it. Add to this the tactic of double-teaming in tackling or in rushing a defensive clear, and one begins to understand why the play at times seemed muddled and strained.

Grouped-Defense

Changes in midfield defense play added another problem to an already troubled attack. Australia and Germany were good examples. When the ball was in possession of an opposing wing or inner, the backs played closer together. Australia's backs moved more in a near-tandem style while Germany's backs were often square. With the backs playing in this relatively close formation, cross passes from the line were usually blocked. The center half was in position to pick up the flat pass. The deeper back filled the space that was formerly used for the deep inner-to-inner plays.

Against a deep covering back the inners have the possibility of screening the back out of play as they cut to receive a cross pass. This has been one of the strongest offensive plays. Against this flatter grouped-defense, it is not easily done.



Centering pass and resulting goal scored by Wales against USA.

When the forward noticed that their cross passes were not getting through, they reverted to using the spaces in the areas immediately ahead of them or tried to work the ball through by combining with an adjacent player. The Netherlands countered with hard flat passes going behind center of its line to opposite wing.

When cross passes are blocked by a concentration of defense in the midfield area, it seems smarter and safer for the backfield player of the offensive team to make the initial pass a crossfield one. More ground would be gained and the inner and wing on the far side would have more space in which to develop the play. If the forward line is alert, this should be an effective counter against a grouped-defense.

Goalkeeper Mobility

In many defenses the goalkeeper was a dominant part of mid-circle play. She became the covering defense for a member of the backfield who was passed at the edge of the circle. She moved out quickly to intercept centering passes, and it was she who intercepted a forward on a corner hit if the forward tried to carry in for a shot. As soon as the goalkeep's initial move was made to break up a play or to stop a pass, one or both of her backs moved behind

Wales goalkeeper intercepts centering pass.

her to take her place in the goal. The picture below shows the Wales goalkeeper clearing a centering pass. Both backs quickly slid in behind her as she started out. They stayed in the goal until the ball was cleared and the play went out of the circle.

Penalty Positions

There were few innovations on corners, free hits, or roll-ins, with performance in the last two surprisingly poor.

Corners

Switzerland shifted its defense towards the ball on corners. They sometimes used four defense on the ball side of the goal, leaving one on the opposite side. When the hit was taken they spread as they moved out. Some countries kept one or two back in the cage with the goalkeeper until the immediate danger was over. These tactics seemed too defensive and tended to muddle the play in front of the goal.

When receiving corner hits The Netherlands' right inner sometimes used a running start, crossing the circle edge as the ball was hit and receiving the ball inside on the run. There was no apparent advantage.

Attack

There were many instances of excellent attack play at the Conference, for example, England versus South Africa, when the strategy of an attacking movement could be visibly followed, the quick perceptive play of The Netherlands' left inner, and other instances. But the general reaction was one of disappointment. This was made more acute because one could sense a potential that was never realized. Stick techniques were never at such a high general level, pace was fast, play was intense, reactions were quick, but attacking movements were often spasmodic and inconclusive. The attacks were not organized and lacked an effective plan.

There were individual efforts that tried to break through by virtue of technique alone, while others combined at most two- or three-player tactics. There were long, quick thrusts towards goals that developed completely on one side of the field and others that tried to force their way through the inside lanes. This was certainly not the choice of the attacks. Determined opposition prevented them from using the spread, swinging offense upon which their play had formerly been based.

This performance does not necessarily indicate a weakening of attack play, but rather that the tactical part of the game must be brought to a higher level so the attacks can deal effectively with variations in strong defense play.

STYLE

The play of each team did not fit neatly into categories. There were two basically different styles: classic and continental. England has traditionally been the exponent of the classic and perhaps The Netherlands of the continental. Conference results indicate that the successful teams of the future will probably be a combination of the two styles.

Use of the Classic Style

When two basically different styles of play approach one another in strength, the play of each is bound to be nullified to some degree. There were many examples of this at the Conference. Compare England's play the first day against South Africa with her two succeeding matches against New Zealand and The Netherlands. The game with South Africa involved two teams of similar strength using similar tactics. Play was open, and there was flowing, graceful movement. England's play against New Zealand and The Netherlands was completely different. New Zealand, playing a hard-hitting, rushing type of game, succeeded notably in preventing England's play to her wings. Crossfield passes were intercepted, and, with the lack of connecting play between defense and attack, England lost possession too often. During the England-Netherlands game, England was plagued by poor fielding, loose tackling, and a continued lack of coordination between defense and attack. The Netherlands was given many opportunities and had an excellent chance of winning.

Effectiveness of the Continental Style

At its present stage of development the continental style is strong defensively, deadly accurate in fielding, hard hitting, harassing, and tenacious, and its exponents are excellent spoilers. Except for a few individual forwards who are highly skilled and fast, the attack lacks finesse and does not yet have sufficient control of its hard-passing game to be a consistent threat.

Teams vary greatly within these basic styles. Germany is strong defensively, and most of the above attributes that relate to defense can be applied to them. They have outstanding control and use of the reverse stick. The "square" position assumed at times by their backs might be considered a weakness, but it was not exploited. If they develop an effective attack, they will be formidable opponents.

The Netherlands was more of a threat on attack than Germany. The line used a flat bullet pass across the field to effect a change of direction against a positioned defense. If the receiver was fortunate enough to control the ball, it was pushed or deflected ahead into the free space, giving the forwards an opportunity to break through. They made much use of strong through pushes, with a race to the space to beat the defense.

Play was intense in the match between Wales and the USA.

Play by the United States Team

Compared to previous conference records, and considering the high level of its competition in 1963, the United States team did fairly well. Its defense was consistently strong and its attack, except for the game against Germany, was always a potential threat. The games which the United States lost were close, and victory was always a strong possibility.

The United States attack has been described as "opportunistic," "break-through," "playing straight ahead with great speed," and "individualistic," and these terms accurately describe the United States style of play. This type of game was responsible for advancing the USA to the point of being serious conference contenders. It was effective in the past and achieved results, the weakness being there was no *alternative*. In this Conference, however, the style was not effective enough against the type of defense encountered to give the United States sufficient scoring opportunities. It is necessary for the USA to develop "styles of play" instead of "style." Individual tactics have been developed to a high degree, and if team tactics can be developed to the same degree, the United States will be on the winning side of those close scores in the future.

If any conclusion is indicated, it is that from now on top hockey will demand more in analytical thinking and creative response—and it will be even more exciting!

1967 International Conference, Cologne, Germany

PART I
MEMORIES AND REFLECTIONS OF THE NINTH IFWHA CONFERENCE

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Argentina	Canada	Holland	South Africa	U.S.A.
Australia	England	Jamaica	Spain	Wales
Austria	France	Ireland	Switzerland	
Belgium	Germany	New Zealand	Trinidad	

As one reads this imposing list of the countries participating in the 1967 Conference, I am sure the feeling of a great international gathering penetrates one's imagination. Yet neither words nor pictures can fully portray the feeling of excitement, anticipation, comradeship, and friendship. It is astounding, as one ponders over the immensity of the organization of such an undertaking, that all of this comes about because of the love of a game and a willingness to serve without remuneration to benefit the growth of the game and all its intangible attributes.

September 11th found the Cologne Airport bustling with the arrival of the teams, delegates, and visitors. Hockey sticks and many accents blended together as everyone eventually gathered at the Deutsche Sporthochschule in Cologne. All teams were assigned to buses (two teams to a bus); each was numbered, and each had the names of the countries posted on its side. Our bus number was 8, our driver for the two weeks was Harry, and our hostess–guide–interpreter was Monica, a University of Cologne student. Each country had its own guide, and I am sure that we left nineteen very tired people behind us at the end of the Conference because they were at our beck and call from early morning until late in the evening.

Welcome

The first night was the welcoming meeting for all teams. The heartwarming applause that greeted the teams as they paraded across the large stage, many of them dressed in their travel uniforms, made

us all realize how fortunate each of us was to be present and that four years of hoping and planning and dreaming had become a reality.

Red was certainly the dominant color of the uniforms. Uniforms of four of the countries also had hats, the most unique being the black sombreros of the Spanish team. The German team was very smartly outfitted in beautifully tailored red suits; the Scots wore pink sweaters and skirts which blended with purple blazers; the Dutch uniforms were blue; those of South Africa, green. The descriptions could go on and on, but mention must be made that the United States players in their navy blue skirts and white blazers held their own in appearance.

The majority of the teams was housed at the Sporthochschule and in small hotels nearby, but all meals were had at the Schose. The American, Scottish, Belgian, and Swiss teams were together in a lovely hotel. Although it was almost a half-hour drive from Cologne, it was only a mile or so from where the games were to be played. We had our breakfast in our own hotel, and our other two meals were served at the Kajeno, a tremendous cafeteria for the Bayer factory. We felt very privileged as we sat down each day at tables complete with waiter service, white tableclothes, vases of fresh flowers, and a printed menu (we all used our German dictionaries). Our meals were quite different from those of the other teams, which were served cafeteria-style.

Opening Day

Opening day, which included a parade, was a beautiful one. The tremendous stadium, which was the scene for the matches on the first and last days of the Conference, was a colorful sight as flags from all the nations participating flew at the tops of mastheads. Color TV, only three weeks old in Germany, plus international TV, which was to carry parts of this event to ninety countries, were on hand. A marvelous German band led the teams, four abreast, into the stadium. The teams were dressed in their playing uniforms; led by their captains, carrying the names of the countries, and the vice-captains, carrying the flags, they made an exciting and brilliant entrance. Long to be remembered was the surprise gift to the opening of the Conference given by Mrs. Kolbenschlag, president of the IFWHA. On a given signal, hundreds of pigeons were released carrying messages of peace to all parts of Germany.

Starting a new custom, which will continue as a tradition, the teams of the hostess country of the last Conference and the present hostess country played the opening game. The final match of the Conference was played by the present and future Conference hostesses. The U.S. team and the German team stood at attention

for their respective national anthems and then took to the field. Our team was determined to recover the 2-1 defeat by the German team ten days before. The United States team had five games of continental hockey behind them, three losses and two victories. They played hard and they played well. The match ended in a scoreless tie. The second game of that opening day brought England onto the field against South Africa. The game ended 3-1 for England; it was the only defeat for South Africa.

In the following days of play, matches were held on the fields of the Bayer Company. The fields had been made especially for the Conference and work had been started on them four years before. It would be difficult to describe these grounds. They were magnificent. Even small boxwood hedges had been planted around two of them to act as a natural barrier to keep spectators away from side lines and end lines. Flags of all the nations flew between two of the fields.

Rain

On the second day of play, when most countries were to have their first game, the rain began. The U.S. played South Africa, a game fairly well dominated by the South Africans. (The result was 4-1, a loss for us.) As the afternoon progressed, the rain intensified, and by the late afternoon games, puddles had accumulated and great lumps of turf were being lifted as the players tried desperately to make the ball move. Players from each country felt heartsick at what was happening to these beautiful fields. Could they ever be renewed for the many days of play that were to follow? When we all returned the next day and for all the many other days of rain that followed, we found the grounds looking as though they had never been played on, appearing to us as they had that first day. The groundsmen were superb.

Because of the rain which lasted for so many days of matches, one did not tend to move from field to field, but rather stayed in one place, trying to keep covered, or moved into the Marquee to keep a little drier.

Due to this, it is difficult to give an overall view of the play of the various countries; however, some things were self-evident. Continental play and its effect on what we all think of as the traditional type of play did not really materialize. Also, it was exciting to see what had happened to the standard of play of countries like Jamaica, Trinidad, Argentina, France, etc. since the 1963 Conference. Many of these countries had witnessed and experienced a great deal four years ago, and during the interval their standard had improved tremendously.

However, playing was not the only thing that occupied our two weeks in Cologne. The business meetings of the IFWHA (particularly

the opening session), the reports of the member countries, the discussion of rules changes, and the closing session were of interest to many. All meetings were held in a large auditorium, and the center section was equipped with ear phones so that everything could be heard either in the original tongue or translated into German, French, or English. Perhaps many more would have attended these various meetings if translations could have been available to everyone but the cost was prohibitive to have such installations for four hundred people.

Social Events

Then there were the social events, such as the Captains and Managers Dinner and the two evenings set aside for National Night, which were a delight to everyone. Most of the performances held during National Night were excellent, many bringing to the audience something traditional. A great deal of time, thought, and effort had gone into the preparation of skits, songs, and dances. The French puppet show done with hockey sticks was the most unique of the performances. There was the Ball, where each country was hosted by a men's hockey club. There was an excellent orchestra, lots of wine, and dancing of every variety. Then, one morning at 7 A.M., all teams, delegates, officers, and visitors embarked at Cologne for a boat ride on the Rhine (the eventual destination was Bonn), a visit to embassies, and then home by our buses. Another day found us on a tour of Leverkusen ending with a luncheon given by the mayor and the Bayer Company, at which time everyone present was given a large colored photograph of the Conference. The final dinner was also given by the Bayer Company. Preceding the meal itself, every person present was given a solid gold piece from Bayer. These gold pieces had originally been made for Bayer's 100th anniversary in 1963 and were presented to everyone who worked for the company. We were asked to accept them as medals of participation as we do not play for awards of any kind. Following this marvelous gift, the company gave a fashion show using the fabrics which are one of its by-products. Then came the dinner and usual speeches of gratitude to those whose efforts made this Conference possible.

During those weeks, there were free mornings, free afternoons, and free evenings to be used for shopping, sightseeing, and socializing. The Touring Team was especially fortunate to have had a gift of two mini-buses from the USFHA. "Pumpernickel" and "Salami," as they were soon named, made it possible for all of us to come and go at will rather than be held to a bus schedule which was planned only for official functions. Our buses brought us closer to the teams from which we were separated by some fifteen miles, and socializing was certainly an important part of the Conference.

Closing Ceremony

On the final day of the Conference, the closing ceremony was held. As the teams gathered for the last parade, a band played and marched to the delight of the crowds, and then the teams paraded for the last time. The atmosphere was one of mixed emotions. The thought of saying farewell to old and new friends dominated the minds of many. As the teams stood at attention, four members of the German team walked across the stadium, climbed to the top, lowered the IFWHA flag, and with one player at each corner of the flag, carried it back down the stairs, and presented it to team members of New Zealand, hostess country for 1971. This ceremony brought tremendous applause, and the acclamation continued as the teams marched out.

Perhaps, as one scans the scores which follow, it would appear at first that our team had not fared well. That is true; we still have much to learn. However, on more careful examination of the schedule, it will be noticed by comparison that we had about the hardest schedule. We played all top countries, and often played on successive days. Because geographically we cannot enjoy International Hockey often, we valued this opportunity to play against Germany, South Africa, Wales, the Netherlands, Australia, and New Zealand.

Match Results

Germany *vs.* U.S.A. 0-0
England *vs.* South Africa ... 3-1
England *vs.* France 1-0
New Zealand *vs.* Canada ... 3-1
U.S.A. *vs.* South Africa 1-4
Netherlands *vs.* Jamaica 8-0
Argentina *vs.* Scotland 2-2
Australia *vs.* Ireland 1-1
Belgium *vs.* Trinidad..... 6-1
Switzerland *vs.* Wales 0-5
Austria *vs.* France 0-1
Argentina *vs.* Canada 0-2
Belgium *vs.* Jamaica 1-0
Australia *vs.* England 0-0
Ireland *vs.* Switzerland..... 3-0
Scotland *vs.* Spain 4-0
Netherlands *vs.*
New Zealand 4-0
Trinidad *vs.* Wales 0-1
Ireland *vs.* Jamaica..... 2-1
Spain *vs.* Switzerland 0-0
Australia *vs.* New Zealand .. 3-1
Scotland *vs.* South Africa... 0-3
Austria *vs.* Spain 1-0
Switzerland *vs.* Trinidad.... 0-0
U.S.A. *vs.* Wales 1-2
Canada *vs.* Germany..... 0-2
Australia *vs.* Belgium 1-1
Austria *vs.* Scotland 0-3
New Zealand *vs.* Wales 0-0
Germany *vs.* Jamaica 4-0
Argentina *vs.* England..... 0-8
Ireland *vs.* South Africa 0-5
Netherlands *vs.* France..... 2-0
Spain *vs.* Trinidad 0-1
Germany *vs.* Wales 1-0
Austria *vs.* Ireland 1-6
Belgium *vs.* Spain..... 1-0
Australia *vs.* South Africa... 1-3
Canada *vs.* Jamaica..... 2-0

Argentina *vs.* France	0-1
Argentina *vs.* Switzerland	4-0
Netherlands *vs.* U.S.A.	4-0
Canada *vs.* England	0-4
France *vs.* Trinidad	0-0
Austria *vs.* Wales	0-5
Netherlands *vs.* South Africa	0-3
Ireland *vs.* Spain	1-0
Jamaica *vs.* Scotland	0-2
New Zealand *vs.* U.S.A.	3-0
Germany *vs.* Switzerland	2-0
Scotland *vs.* Trinidad	2-1
Argentina *vs.* Belgium	2-3
Australia *vs.* U.S.A.	2-1
Argentina *vs.* Wales	1-1
Belgium *vs.* England	0-1
Canada *vs.* France	1-0
Jamaica *vs.* New Zealand	0-4
Spain *vs.* Switzerland	0-0
Austria *vs.* Trinidad	0-0
Australia *vs.* Netherlands	3-1
Germany *vs.* New Zealand	1-0

Our ten days of touring and playing in Berlin, Hanover, Lubeck, and Hamburg before the Conference, followed by one game and a delightful stay in Paris, and a stop in London for two games, all combined to make our tour of five weeks stimulating, rewarding, and a privilege to all of us who had been chosen to represent the USFHA in 1967.

United States Touring Team

Adele Boyd – Captain
Mary Ann Harris – Vice Captain
Alison Hersey
Joan Moser
Sue Day Stahl
Sally Wilkins
Sue Honeysett
Betty Miller
Judy Smiley
Faye Bardman
Bonnie Smith
Vonnie Gros
Phyllis Huerstel
Gertrude Kesting

Libby Williams – Coach
Anne Delano – Manager

PART II
OFFENSIVE PLAY

MARY ANN HARRIS
Ambler Campus, Temple University
Ambler, Pa.

The objective of offensive play is to score. You will see from some of the match results a good picture of the successful teams and the abundance of goals made by these teams. Before we look briefly at a sample of the overall schedule and attempt to form opinions

about team offensive strengths, it is necessary to remind the reader of a peculiarity in the schedule of this Conference. Each team has a set schedule of six or seven games. In a few cases strong teams played all those close to them in ability; in others, strong teams played a mixture of weak and strong teams; and in another instance a weak team played a very strong team schedule. Therefore, since no method is followed to devise a definite winner, one must try to determine which teams were strongest by a combination of factors–schedule, scores, and presentation on the field. As examples, you will find some team schedules with results and statistics in the following:

England

Argentina	8-0
Australia	0-0
Canada	4-0
France	1-0
South Africa	3-1
Belgium	1-0
*	5-0-1
†	17-1

United States

Australia	1-2
Germany	0-0
Netherlands	0-4
New Zealand	0-3
South Africa	1-4
Wales	1-2
	0-5-1
	3-15

South Africa

Australia	3-1
England	1-3
Ireland	5-0
Netherlands	3-0
Scotland	3-0
U.S.A.	4-1
	5-1-0
	19-5

New Zealand

Australia	1-3
Canada	3-1
Jamaica	4-0
Netherlands	0-4
Germany	1-0
U.S.A.	3-0
Wales	0-0
	4-2-1
	12-8

Germany

Canada	2-0
Jamaica	4-0
New Zealand	0-1
U.S.A.	0-0
Wales	1-0
Switzerland	2-0
	4-1-1
	9-1

Australia

England	0-0
Belgium	1-1
Ireland	1-1
U.S.A.	2-1
New Zealand	3-1
South Africa	1-3
Netherlands	3-1
	3-1-3
	11-8

* Win, Loss, Tie.

† Goals for and against.

Netherlands		*Jamaica*	
Australia	1-3	Belgium	0-1
Jamaica	8-0	Canada	0-2
New Zealand	4-0	Germany	0-4
South Africa	0-3	Ireland	1-2
U.S.A.	4-0	Netherlands	0-8
France	2-0	New Zealand	0-4
	4-2-0	Scotland	0-2
	19-6		0-7-0
			1-23

The first seven teams seemed to be considered stronger. (Jamaica is not now one of the strongest teams). Note the schedules of these teams, remembering which are the stronger teams and then who their opponents were. Weaker teams can be picked out by noting the high scores made by their stronger opponents. Some teams had challenges all the way; some had a few breathers.

While it is difficult to draw definite conclusions, you can look at some records. England, producing 17 goals, was undefeated but tied Australia and did play a weaker schedule. As you go on, you can find other strong teams. An example would be the Netherlands, who scored 19 goals, but lost to South Africa and Australia. In the end you come to the team from South Africa with a production of 19 goals and a record of only one loss coming as an upset at the hands of England. This doesn't mean that they were the best, but considering their schedule of games and looking further at their presentation on the field, I would tend to place them on the top of the international ratings.

The way that teams could be up and then down with each game again shows the inconsistency in winning ability and perhaps the absence of professional-type training in the sport.

The fields were beautiful and well cared for. With the abundance of rain it was amazing that the fields remained in top condition. When you have good conditions of flat ground with well-cut grass you are treated to displays of stickwork not possible on rough, uncut terrain. The ball control shown by many teams showed the effort put forth and possibly practice on grounds similar to these.

We'll take a brief look at some of the successful teams. What is it about these teams which is exciting or makes them aggressive and potentially attacking?

New Zealand was a team which showed improvement as they progressed through their schedule. Training which produced physical strength and power was felt in their aggressive, attacking style of play.

Australia was very quick on the ball; there was always another and then another player–aggressiveness again produced a powerful style of hockey.

Germany, when on their game, could show excellent use of the reverse stick and the ability to control hard passes. Their game was more attacking than before, with good use of the wings. The attack was made possible because of a strong defense. Their game showed some versatility as you could see the use of the inner dropping back to aid in defense, or in another instance you could see the line together bearing on the goal.

Wales played as a team and was strong as a team with each player fitting into her job. They employed some very nice passing among the defense to get their team on attack.

England displayed the controlled hockey, beautiful to watch and fun to play against. Their forward line could be very dangerous, setting up plays and going through the defense with excellent stickwork to finish, more often than not, with a goal.

We can look at Belgium and find a team greatly improved over 1963. They seemed to have combined the English type and Continental style hockey and were exciting to watch.

A great deal of Holland's success came from the spark and "go for goal" attitude coupled with a fairly strong defense. The training of the Dutch girls was evident. We could see speed when they went to play the ball and when they had it. They relied on using their wings and the wings excelled at centering the ball.

South Africa was the strongest team, an example of teamwork learned and applied. They all could pass with precision to a teammate. The use and timing of the purposeful push-passes, hard or soft, or the needed hard hit almost seemed to be a natural skill with them. There was a flow of continuing movement through body, feet and ball.

There were few new offensive movements. It seemed that some of the tactics seen briefly at the 1963 Conference were employed more. More countries now are bringing the reverse stick into their game. There also seemed to be a wider use of offensive movements off of the defense–give and take between halfbacks and fullbacks–the pass back to the halfback who could in turn initiate a better play forward.

There is a need to improve the standard of hockey in the United States. What is there about the stronger teams towards which we could strive? We need more hockey, more high level competition, and better fields. To play a possession game should be one of our first goals; therefore, discipline in perfecting stickwork is necessary. There must be ball control in receiving, accuracy in passing, and passing to the occasion. There should be a smooth carry-through in

body movement through to the ball to continue on, to dodge, to pass, to shoot. Footwork must be worked on and stressed as ultimate in achieving results with movement and stickwork. Training to produce more speed and acceleration is essential. We must establish a "go for goal" attitude with the style and finesse to make it real.

Men's Field Hockey in the United States

E. NEWBOLD BLACK, III
Haverford, Pa.

If one were to ask the average lady hockey player in the United States what men's field hockey consisted of, she would probably reply that it was a group of students from Harvard, Princeton, Yale, Williams, or some other men's college, who descend on the nearest girls' campus, swinging clubs in their hands and bragging about their athletic prowess. The outcome of such games usually follows a pattern. The boys meet girls, the girls meet boys, and the score is quickly forgotten. Usually the boys are the first to forget the score as they generally lose amid claims of partiality on the part of the umpire and rules that are impossible.

Field hockey for men is a well organized and respected sport which is played widely throughout the world. The governing body, the Federation Internationale de Hockey sur Gazon (FIH), was founded in Paris on January 7, 1924. It now has 51 member countries. This was not the start of organized men's hockey, however, since several hockey clubs in England have recently celebrated their 100th anniversaries.

Rise in Interest in the USA

Field hockey has developed more slowly in America but is now catching on fast. The Field Hockey Association of America was founded in 1930, due to the efforts of Henry Kirk Greer, whose wife, Louise Roberts "Bobby" Greer, was one of the original English coaches who came to the United States in the early twenties. The FHAA is now a member of the FIH and the United States Olympic Committee.

In the United States the game has been mainly played along the Eastern Seaboard, but in 1961 the Air Force Academy added it to their program. Recently several eastern colleges have started to play, and we hope this trend will continue. Real progress seems to be held back by the image of field hockey as a girls' game and by the lack of available fields at schools and colleges. The former problem is gradually being overcome by more widespread knowledge of the game, but the field problem is still troublesome and will not be easy to overcome.

Differences Between the Men's and Women's Game

The men's game is essentially the same as ladies' hockey, although the alleys on a men's field are seven yards wide rather than five, and

the striking circle is 16 yards in radius rather than 15. In men's hockey the 25-yard line bully has been replaced by a hit from a point 16 yards from where the ball crossed the end line. For penalty corners, men line up with only six defenders on the goal line, but all eleven are brought back for long corners. In order to keep down rough or dangerous play, the penalty bully has been replaced by a penalty flick taken eight yards from the goal mouth.

The pattern of the men's game has been greatly affected by the success of India and Pakistan. These two countries have long been exponents of short, triangular passes which have been adopted to some degree by nearly all the countries. The Indian stick was universally adopted by the men in 1956, and one rarely sees an English-style hockey stick in men's matches today. Field hockey for men is a highly developed sport, and although the ladies have many more players in America, this is not the case throughout the world.

The Field Hockey Association of America is trying to promote the game as much as possible in schools and colleges as this is the key to success in the future. We look forward to the day when our men's team will enjoy the same measure of success in international competition as do our ladies, but we have a way to go before this will be true. For this reason we wish to thank the Division for Girls and Women's Sports and the United States Field Hockey Association for giving us this opportunity to explain a bit about men's field hockey.

(*Editor's note:* Two recent changes in the rules for women's hockey have decreased the differences between the rules for men and women. Women now use the 16 yard striking circle and the 16 yard hit has replaced the 25 yard bully. The Indian stick is used by most women players.)

LACROSSE

The New Lacrosse Film—Let's Play Lacrosse

ALISON HERSEY
New Boston, N. H.

For some time now there has been an urgent need for a lacrosse film which would not only demonstrate the skills of the game, but which would also give beginners an idea of the beauty and grace of lacrosse. The United States Women's Lacrosse Association recognized this need, and has produced a 22-minute sound, color film presenting both skills and play. It is aimed specifically at the uninitiated, but has a great deal to offer the more knowledgeable as well.

USWLA provided all of the essential ingredients for a first-rate film: financial backing, an excellent and interested film company, and a sparkling cast of players. The 1967 Great Britain and Ireland Touring Team was in this country, providing players for a game situation of international caliber. Well-founded pride in the skill of our players led to the decision to use current U.S. players for the stickwork and to utilize the exemplary team play of the touring team for the game sequence.

Much of the credit for the ease of the filming goes to the demonstrators for performing almost flawslessly. The cameramen, who were rapidly becoming lacrosse fans, could scarcely believe the speed and pace of play. They came away with a new respect and admiration for the sport. At the national tournament, they were able to film nearly an entire game, which produced some excellent sequences, showing all of the skills and play situations of a lacrosse game. Cutting, marking, quick passing, bodychecking, intercepting, shooting, and goalkeeping are all clearly demonstrated.

At last the USWLA has the film which teachers and coaches have been waiting for! It demonstrates all of the skills essential to the game of lacrosse: the grip, cradle, pivot, pick-up, catch, pass, and dodge, as well as bodychecking, shooting, and goalkeeping, both in slow motion and at regular speed. The film gives the viewer an opportunity to study the skills and to see the pace and structure of a top-flight match, an experience which is often difficult to find.

The film is available through the USWLA Film Distributors listed in the *Guides*.

Lacrosse—A New Sport?

MILDRED J. BARNES
Central Missouri State College
Warrensburg, Mo.

Although lacrosse contains skills and strategies unique to the game, it embodies many similarities to the game of basketball. Individual techniques such as feinting, dodging, and outting are used in an almost identical manner in both games. Many of the offensive fundamentals and the principles for individual defensive techniques in basketball are followed in lacrosse. Why then do so many of us introduce lacrosse to beginners as a "new" game? Why do we not establish a better learning climate by relating basketball techniques and strategies to lacrosse? At the beginning level can we not "sell" (if this is necessary) and present lacrosse as a variation of basketball?

Capitalizing on the similarities between the two games will help the students gain a clearer concept of lacrosse. So many of our students are trying to learn the game in an area where lacrosse is not as yet popularized; hence they do not have opportunities to view a game and see the various techniques and strategies being used with some degree of perfection. Without an understanding of the relationship between the parts and the whole, beginners sometimes find the game of lacrosse overwhelming. Not only are they confronted with the unique technique of cradling (the basis for all other lacrosse skills) but they also are faced with learning strategies quite different from those involved with other field games. Thus, it behooves us as teachers to assist the transfer of learning and make the game of lacrosse more easily comprehensible.

Obviously, certain dissimilarities do exist between the two games. This is created in part by the greater length and width of the lacrosse field. Also the smaller ball can be thrown greater distances with considerably more accuracy than the larger basketball. In addition, the use of an implement (the crosse) to project the ball makes it possible to throw longer distances with less effort. Because of the additional length and width of the playing surface more players form a team; therefore more of them become involved in offensive and defensive strategies. Nevertheless, these variations become minor in nature from the point of view of the beginning player.

Offensive Similarities

The attack in both basketball and lacrosse is built upon quick, accurate passing. The ball may be advanced down the field (court) much more rapidly by a series of passes than by any other means. In

both games players must run to meet a pass, and the cut is made in the direction of an open space toward the player with the ball. The angle of cuts should be varied from one which is made directly toward the player to one which is at right angles to her. Rarely should a cut be made away from the player with the ball. The latter is a very difficult maneuver to execute from the point of view of throwing an accurate pass and making a catch overhead. As in basketball, this tactic is effective when players can draw their opponents away from goal and cut deep behind them, but this ability is manifested by more advanced players.

In cutting to receive passes, players must run several yards in one direction. Commonly a beginner in both games either slides while attempting to get free or cuts two or three steps and then reverses her direction by taking a similar number of steps. In reality she has cut "nowhere" and her opponent can mark her by practically standing still. Players may feint by taking a few steps in one direction and then make a cut of a longer nature in another direction.

Since several players cut to receive each pass, some of the cuts will be unused. Players who are not the recipients of the pass must then reposition themselves for a new cut. If the cut is made toward goal, the players must circle or loop back so that the area in front of goal does not become congested. Here an analogy may be made with the roving players in basketball and third home, center, and the wings in lacrosse. In both instances these players tend to play on the outside, i.e., further from goal than the rest of their offensive teammates. If they cut toward goal, other players must cut out to create spaces.

As a defensive player intercepts a pass or recovers a rebound from the basket or off the goalkeeper's pads, she immediately pivots toward the side of the field. Other defensive players cut toward that side, and the player who receives the pass pivots toward the side line or at least feints in that direction before turning inward toward the center. Once again the offensive pattern is similar. Players pass and pivot toward the side line and avoid passing the ball across the goal. Also they attempt to pass the ball as quickly as possible beyond midfield (midcourt), after which the so-called stationary players then reposition and have time for a brief rest before the ball returns to their end.

Another analogy may be drawn between the dribble in basketball and running in lacrosse. Both contribute to the character of the game and to strategy, if not used excessively. They prove to be valuable aids for dodging, driving toward goal, and advancing the ball downfield *until* a teammate becomes free. There is one other effective means of utilizing this tactic. A player who has dodged or

out-maneuvered her opponent should run (dribble) toward goal until she draws a teammate's opponent. The teammate is then free for a subsequent pass. Running and dribbling are valuable tools but are not a substitute for passing.

Defensive Similarities

Individual defensive techniques employed in lacrosse are quite similar to those used in basketball. Basically, the defensive player attempts to stay between her opponent and the goal and tries to intercept only when she believes she will succeed. Her stance is one with the weight on the balls of her feet and knees bent to lower her center of gravity so that she may move in any desired direction.

Because of the increased area on a lacrosse field, there is more opportunity for an attack player to evade her opponent. Since attack players become more dangerous as their proximity to the goal increases, it is essential in both games that attack players within scoring distance be marked closely. On the other hand, attack players who position themselves near midfield (midcourt) are not particularly dangerous. Therefore the defense should play them loosely. Whereas this defensive positioning is highly advantageous in basketball, it is clearly essential in lacrosse, for it is extremely difficult for a defensive player to recover good position after being evaded. Though there is a decided difference in the distance that the defense players stand from their opponents, the principle of marking players loosely near midfield (midcourt) is followed in both games. On occasion as an element of surprise or in a pressing defense, the players at midfield can be marked closely.

The analogy between a player dribbling (basketball) and running with the ball (lacrosse) was drawn earlier. Defensively a player positions herself for this tactic similarily in both games. In either instance the defense player must start running backward as an opponent approaches since it is relatively easy to dodge a stationary player. By running backward, the defense player can achieve the same speed as that of her opponent and is better prepared to retain a good defensive position.

There is one basic difference in individual guarding techniques between the two games. In basketball the fundamental footwork involves the slide. In lacrosse a run must be used to gain greater speed due to the extensive size of the field and the ruling which permits a player to run with the ball. Obviously a player who may run an unlimited distance with the ball in her crosse may move much faster than her counterpart (dribbler) in basketball. Thus it is necessary for defensive players in lacrosse to run so that they may gain the speed required to maintain pace with their opponent.

Because of this difference in footwork it is well to note that dodging is considerably easier in lacrosse than it is in basketball. This is true because a defensive player shifts her body weight outside the base of support onto a lone supporting leg during the run. During the slide, the weight is over the base of support and equally distributed over both feet. Hence, a change of direction may be made more easily and quickly in lacrosse.

In basketball a team has the option of playing a player-to-player or a zone defense. In lacrosse there is an unwritten code which limits the style of defense to player-to-player. This is because the goal in lacrosse is on the ground and the ball may be shot in a downward direction at a high rate of speed. In basketball there is no goalkeeper and the ball is shot in an upward flight with a soft touch. Use of the zone defense in lacrosse is dangerous and is not recommended. The principles of player-to-player defense, however, are similar in both games.

It is evident that there are many basic similarities between lacrosse and basketball. For the beginner, knowledge of these similarities is extremely helpful for developing a concept of what it is he is about to attempt. An understanding of certain fundamentals will permit her to learn more complex concepts later. As teachers, let us follow the principle of proceeding from the known to the unknown. Let us assist the transfer of learning by relating basketball techniques and strategies to lacrosse.

USWLA World Tour—1969

ALISON HERSEY
New Boston, N.H.

The game of lacrosse has gone world wide. It has been discovered in remote parts and introduced to new areas. For years Americans have been content with the flow of coaches and teams back and forth across the Atlantic. We learned the game from the British and looked no farther than England.

Several years ago a men's lacrosse team from Australia toured our country and a mutual discovery was made. Women in both countries play the game. The seeds of a world tour were sown and they came into full bloom in the summer of 1969.

Australia invited two teams, one from Great Britain and one from the U.S. to come down under to coach and play. As plans developed, the tour became worldwide and included games in New Zealand, Hong Kong, Tokyo, and Netherlands.

New Zealand:

Lacrosse is a brand new sport to the New Zealanders except for one or two private schools with English headmistresses. Two exhibition matches were well received and at the finish of one, interested spectators were invited to try with the help of the players. Young and not so young, male and female, all tried and after a half an hour, all were put into a game situation. If enthusiasm of the group were the basis of the game, lacrosse would be assured in New Zealand.

Australia:

Lacrosse is established in Australia under the tutelage of the men but is becoming more and more independent. The purpose of our tour was to encourage this change and introduce the Anglo-American style of play.

Throughout the tour we played both exhibition matches, mixing the British and American teams, and competitive matches versus the Australian and British teams. The tour culminated in a round robin tournament with Great Britain finishing as the "world champion." At the conclusion of the games, there was no doubt that the man to man defense combined with the quick, accurate passing by the attack was more successful than the zone defense and running game of the Australians.

Phase one in Australian lacrosse has been completed. The game is enthusiastically established and the Australians are aware of the standard in other countries.

Phase two will now be the exchange of coaches and teams to raise their standard. Plans were made for coaches to visit in the summer of 1970 and for Australia to send a team abroad in 1972.

Figure 1. World Tour, 1969 USWLA and "British Pioneers" Touring Teams. (Picture, courtesy of Betty Shellenberger.)

Front Row, l. to r.: E. Russell–US, V. Gros–US, K. Burke–US, S. Honeysett–US, A. Hersey–US Capt., S. Farr–BP Capt., D. Holt–BP, S. McCrann–BP, J. Sheepshanks–BP, L. Bailey–BP.

Middle row, l. to r.: M. Boyd-BP Manager, J. Pitts–US, Mrs. S. Hinsley–US, M. Waldman–US, T. Sloan–US, M. Crawford–BP, P. Swayne–BP, K. Shellard–BP, M. Davies–BP, P. Wilson–BP, Mrs. M. Conklin–US Manager.

Back row, l. to r.: L. Swarts–US, J. Demars–US, N. Smith–US, A. Clapperton–BP, J. Smith–US, B. J. Lewis–BP, C. McTavish–BP, J. Minns–BP, J. Smiley–US, P. Taylor–US, J. O'Conner–BP.

Japan:

Women's lacrosse received a big boost when we were invited to give an exhibition of skills and play a match at the International Congress of Physical Education and Sports for Girls and Women in Tokyo. We were well received, as curiosity turned to enthusiasm. Hockey is established in Japan and so we hope lacrosse will be accepted as well.

Hong Kong:

Under the guidance of one person and the sponsorship of the University, lacrosse is played, generally by the men and in part by

the women. We coached a bit and played an exhibition match. If enthusiasm and dedication are enough, lacrosse will grow in Hong Kong.

Netherlands:

Since 1963 there has been a nucleus of Dutch hockey players who have become interested in lacrosse. As a result we were able to stop in on the way home to play and exhibition match. The men as well as the women were impressed by the speed and quickness of the game and anticipate putting it into their training program. With easy access to Britain across the channel, the future looks good.

Home again after the world tour, one truly feels that lacrosse has become an international sport. Tremendous interest and enthusiasm were met everywhere and already plans are underway to re-enforce the initial efforts and contacts made by the 1969 Touring Team.

The Role of the Arms in Cradling*

MARY A. RICE
Glassboro State College,
Glassboro, N. J.
LOUISE E. KINDIG
University of Georgia
Athens, Ga.

Lacrosse coaches and teachers frequently discuss the roles of the top and bottom arms in the cradle. Traditionally, the bottom arm has been assumed to play the major role in moving the crosse while the top arm aids in control of the crosse. Many skilled players, however, appear to use the top arm as much as the bottom arm whether the crosse is held in a vertical plane or whether the crosse is dropped to a position approaching the horizontal plane. The involvement of each arm in the traditional cradle (vertical cradle) and in the modified cradle (horizontal cradle) was studied electromyographically.[1]

Procedures

Twelve skilled subjects ran on a motor driven treadmill at 6 mph and cradled in a vertical position and in the position of greatest ease. When subjects cradled in the position of greatest ease, examination of photographs indicated that each subject definitely dropped the crosse from a vertical plane to a position approaching the horizontal plane. There was variability in how much the crosse was dropped. The electrical potentials of the biceps brachii (elbow flexor), the flexor carpi radialis (wrist flexor), and the pronator teres (forearm pronator) of each arm were recorded in the vertical cradle and the horizontal cradles. The data were analyzed by visual inspection and by analysis of variance ($P = 05$).

Findings

From visual inspection of the electromyograms, it was noted that the general pattern of muscle activity during each cradle was similar for all subjects. However, there was individual variation when a

* *Pictures in this article by courtesy of Nancy Blum.*

[1] This study was conducted by Dr. Rice in partial fulfillment for the requirement for the Ed.D. degree at Temple University, May 1969 and is available through University Microfilms.

Figure 1. An open field cradle approaching the horizontal.

Figure 2. More vertical cradle, on way to goal.

particular muscle began to act during the cradling cycle and when it was most active. When the activity of corresponding muscles in each arm was compared, greater similarity occurred in the horizontal cradle than in the vertical cradle. Other findings from the visual analysis supported the results of the statistical analysis which follow:

1. In the vertical cradle, the total muscle activity of the top arm was not significantly different from the total muscle activity of the bottom arm.

2. In the horizontal cradle, the total muscle activity of the top arm was significantly greater than the total muscle activity of the bottom arm.

3. In the vertical cradle, the combined top arm and bottom arm activity of the biceps brachii and of the flexor carpi radialis was significantly greater than the combined activity of these muscles in the horizontal cradle. The combined top and bottom arm activity of the pronator teres was not significantly different in the two cradles.

4. The activity of a specific muscle in one arm was compared to the activity of the corresponding muscle in the other arm for each cradle.
   a. The biceps brachii was significantly more active in the bottom arm than in the top arm during the vertical cradle, but there was no difference in the activity during the horizontal cradle.

b. The flexor carpi radialis activity was not significantly different between arms for either cradle.
c. The pronator teres activity was not significantly different between arms in the vertical cradle, but the activity in the top arm was significantly greater than in the bottom arm in the horizontal cradle.

Within the limitations of this investigation, the following conclusions seem warranted:

1. The top arm is involved at least as much as the bottom arm in cradling.
2. The total muscle involvement tends to be greater in the vertical cradle than in the horizontal cradle.
3. Single muscle involvement varies in the top and bottom arms in each style of cradling.

Implications

The results of this investigation lend support to the observation made by Mushier[2] when she advocated that teachers emphasize the use of both arms in teaching lacrosse. So far as the muscles studied represent the involvement of the arms in cradling, the top arm appears to be as active as the bottom arm in skilled players. The bottom arm movement of the beginner may always be the primary concern for the teacher since that arm is usually the non-dominant arm. Nevertheless, it does seem significant that the top arm is definitely involved, and therefore, could be an important factor in skill learning and refinement.

Differences noted in muscle activity during the vertical cradle and during the horizontal cradle may also be especially relevant for lacrosse teachers. Although cradling with the crosse in a vertical plane is an essential skill and merits special emphasis in lacrosse teaching, skilled players frequently drop the crosse to a more horizontal position and cradle in that position with no apparent disadvantage. There are probably few teachers and coaches who do not recognize the value of each cradling style in specific situations or for specific players. Evidence from this investigation indicates that the two cradles are distinct skills and opens to query the advisability of introducing both cradles to beginners early in their learning experience.

In the horizontal cradle, the top and bottom arm muscles for most subjects tended to function similarly and at approximately the

[2] Carol Mushier, "Top Hand for Top Notch Lacrosse," *Crosse-Checks*, 1965, p. 17.

same time, that is, the wrists flexed at the same time and the elbows flexed at the same time. In the vertical cradle, however, maximum muscle activity in one arm was accompanied by decreasing or minimal activity of the corresponding muscle in the other arm, that is, as the bottom wrist flexed, the top wrist extended. The beginner, who is very concerned with keeping the ball in the crosse, might experience earlier success by performing the bilateral arm movements in the horizontal cradle rather than by performing the unilateral arm movements in the vertical cradle.

Whether the greater tonal muscle activity in the vertical cradle as opposed to the horizontal cradle might be an important factor in degree of fatigue, is probably a moot question. Nevertheless, it is accepted that muscle fatigue accompanies repetition of a given movement and tentatively established that muscle fatigue is a negative influence in motor learning. *If* both styles of cradling are important, and *if* muscle function differs in the two cradles, then the learning of either style of cradling may be enhanced by practicing the two cradles alternately, especially when practice periods are long.

In conclusion, the reader is cautioned to recognize the limitations of this investigation and to realize that the discussion related to the findings is speculative. If the obvious has been supported, if statements can be confirmed or refuted, if questions have been raised, or if further research has been encouraged, then the purpose of the writers has been fulfilled.

Progression: Key to Development of Motivating Practices

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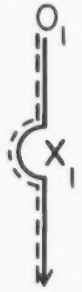
Everyone seems to be looking for new practices to motivate players to continue developing sport skills, and lacrosse instructors are no exception. Stickwork practices should be exciting challenges and considered one of the most important aspects of developing outstanding skill.

A suggested series of practices developed from one basic pattern (partners face to face) and using basic skills (cradling, dodging) follows. The method used to expand this simple drill into its more complex form involves basically four principles which can readily be applied to almost any situation.

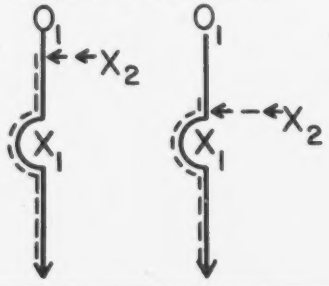
1. Adding more players
2. Changing the formation
   Variations of—
   - distance between players
   - movements of players
   - movement of ball
   - opposition or no opposition

   All are related to the timing of the practice.
3. Increasing the number of skills necessary to complete the practice
4. Varying desired standard of performance

KEY TO DIAGRAMS

PROGRESSION	DIAGRAM	EXPLANATION	MAJOR EMPHASIS
Basic pattern: partners, face to face	1. 	1. Player O_1 starts *with* the ball and runs and dodges past player X_1. X_1 offers no opposition.	Cradling Dodging Footwork
Basic practice: one player against another		1a. Same, with variation of distance between O_1 and X_1 at the start of the practice.	Cradling Dodging Footwork *Timing
		1b. Same, with X_1 offering opposition—increasing it according to the situation.	Cradling Dodging Footwork Timing
			*Body Checking *Crosse checking
Pattern same Practice beginning to develop.	2. same as 1.	2. Repeat with possible variations: O_1 tosses ball to self and takes it on the move. O_1 picks up stationary or moving ball.	Cradling Dodging Footwork Timing Body checking Crosse checking Picking up ball

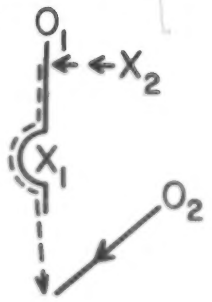
* New skills

PROGRESSION	DIAGRAM	EXPLANATION	MAJOR EMPHASIS
Pattern change Practice continues to develop.	3.	3. Third player X_2 begins the practice by passing the ball to O_1 who catches it and dodges past X_1. Repeat practices 1 and 2 with all listed variations.	Cradling Dodging Footwork Timing Body checking Crosse checking Picking up ball *Passing *Catching
Decreasing distance between O_1 and X_1 while receiving a pass—a challenging practice when X_1 plays with full opposition.	Example of variations under 1a. 		

Pattern change

Practice continues to develop.

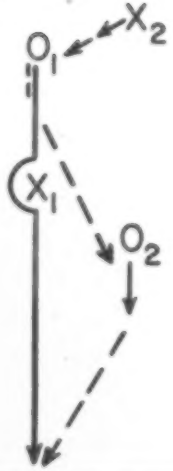
4.



4. Continuation of 3. Add pass to new player O_2 after X_2 has passed to O_1 who catches ball, dodges X_1, and passes to O_2.

Cradling
Dodging
Footwork
Timing
Body checking
Crosse checking
Picking up ball
Passing
Catching
*Cutting

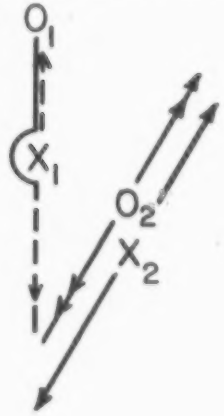
4a.



4a. O_1 passes, then recuts for pass from O_2.

4b. O_1 either passes or dodges.

Cradling
Dodging
Footwork
Timing
Body checking
Crosse checking
Picking up ball
Passing
Catching
Cutting
*Timing of cut
*Team play

PROGRESSION	DIAGRAM	EXPLANATION	MAJOR EMPHASIS
Pattern change **Practice continues to develop.**	**5.** 	**5. Same practice except X_1 tosses ball to O_1 (or O_1 to self) and O_2 is now marked.** **Go through progression 4, 4a, and 4b.**	**Cradling** **Dodging** **Footwork** **Timing** **Body checking** **Crosse checking** **Picking up ball** **Passing** **Catching** **Cutting** **Timing of cut** **Team play** ***Dodging and marking**

Towards a More Successful Draw

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What is most important in the winning of a draw? What must one do to consistently win the draw? Why does a good center lose the draw? These and other questions were asked of college, association, and U.S. team players who have had experience as centers in the game of lacrosse. The following is an evaluation of those skills they found most useful, in order of their importance, to winning the draw.

Figure 1.

Timing

First of importance on many centers' lists is the value of timing. The ability to react quickly to the official's whistle, or "Ready . . . draw" signal is essential to getting the wood of the crosse on the ball first. That means being mentally alert enough to react to the signal so that the crosse may be raised sooner than an opponent's. It also means training oneself to anticipate the official's call of the draw. This job is easier if the official does not vary the time between the "Ready . . . draw" command. If she does, and if she is facing you, watch her to see when she is going to say "draw" (or blow the whistle) to start the play. If she is behind you, listen for her to take a breath before she gives the signal.

Timing sometimes means hesitating a fraction of a second after your opponent reacts. Hesitating may enable you to get the angle of your crosse on the ball when your opponent has an especially deep pocket in her crosse.

Figure 2. "Ready."

Technique of Raising the Crosse

In order for timing to be of value, one must know how to raise the crosse properly in order to have control over the ball, and to direct its flight. The crosse must be raised into the air, and not pushed forward. Failure to raise it might result in the draw having to be repeated.

Control is accomplished by getting wood on the ball. A turn of the wrists can help to do this, which will in turn help give the ball distance and direction. A top and bottom wrist that is being up and in towards yourself will bring the crosse to a position almost horizontal to the ground. This should help get wood on the ball first so that the ball can be "scraped" off the back of your opponent's crosse. Some centers prefer to alter their grip before the draw is taken by markedly flexing the butt hand wrist. This, plus a turn of the top wrist on the signal, forces a turn of the crosse that sometimes results in an advantage.

A good center must not only consistently win the draw, but should also be able to direct its flight. A draw to one's own left attack wing is better accomplished with a follow-through of the crosse well up and over your head with the back of the crosse facing in the direction the ball is to go. One directed to the third home calls for a follow-through straight up and then forward, with the back of the crosse facing towards that position. Finally, a draw to yourself might be achieved by raising the crosse straight up with the follow-through ending in that position, and the back of the crosse facing up.

Figure 3. "Draw."

Pressure

Timing and draw technique must be coupled with the right amount of pressure to retain control of the ball. The ability to apply pressure, and at the same time retain your balance, is especially necessary against an opponent who pushes hard against your crosse. A draw can be lost when your opponent relaxes her pressure just before or on the signal giving you nothing to push against. If you find you often lose the draw to a particular opponent, try putting the pressure of your crosse in different places.

Stance

A stance that allots for both balance and strength is important. Knees should be slightly bent with one foot forward touching the line. Although centers are usually taught to place their right foot forward, some vary their stance, depending on where they want the ball to go. A strong draw to the left attack wing is better achieved by some centers when their left foot is forward. This stance might also work better for a draw to the third home position. One directed to your left defense wing would probably require the right foot forward.

Know Your Opponent

If your opponent wins a draw you must ask yourself, "Why?" Any of the above mentioned points might provide an answer. Perhaps her timing was better, or the pressure of her crosse was perfect. Does she alternate her pressure or timing to force you to make adjustments in your draw?

Look also to the condition of her crosse. A large pocket may make it difficult to "scrape" the ball off the back of her crosse. If so, your timing will have to be especially good in order to get your wood on the ball.

Finally, and most important, does she draw left handed? Most right handed players feel that left handed players have an advantage in the draw situation. Their movements are different and thus difficult to anticipate, as there is a different type of leverage applied as she draws the ball up and over her head. If you find you are not too successful against a left handed player, turn around and try it her way. It might throw her slightly off guard, and result in a better chance for you.

Another point to remember is not to allow the wood of your opponent's crosse to start higher than yours. Although the official should control this by placing both woods together and parallel to the ground, any slight upward movement by your opponent could result in her getting wood on the ball first.

Placement of the Ball in the Crosse

Where the official places the ball in the crosse can sometimes play a part in who gets the draw, and where it will be directed. Although it should be placed in the center of the backs of both crosses, some centers favor when its placement is nearer the bridge, or upper part of the crosse. When it is situated near the upper end, a draw to the left is often made easier. Some left handed players indicate a preference for the ball nearer the bridge side of the crosse. Either way, if you do not find the off-center position favorable, try moving it to the center of your crosse.

Luck

Does luck play some part in one's winning of the draw? Before you decide, practice and concentrate on the above techniques, do some experimenting on your own, and constantly compensate for your opponent's draw. Then decide if you have not, indeed, achieved a more successful draw technique.

Goalkeeping

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Good stickwork, accurate passes, good footwork, constantly repositioning, calm and cool, aggressive, moves toward ball, always aware of ball position in relation to own position and other players—Do you have a player on your team who meets these qualifications? Let's hope so—a home, line defense, or wing. Everyone knows and recognizes the importance of those skills in these positions; however, how well trained and prepared is your goalkeeper in all of those skills? Just as skilled as, say, the cover point or home? The answer should be yes, but is it? Probably not. For any other position, the girl who has speed or moves well, who works well with her teammates, who passes accurately, and who has the best stickwork earns her position. How did the goalkeeper earn *her* position? More than likely, she didn't. Instead, wasn't she the girl who the coach felt would stand in front of a "huge" six-foot square cage while an attack player tried to put a tiny hard rubber ball past her? And, all the while, the coach probably hoped that the shot would be a poor one and come right at the goalkeeper or at least into her stick so she wouldn't have to move.

Many people cannot understand why there is always such a shortage of goalkeepers. Is it really any wonder, though, when one thinks of how the goalkeeper is chosen, and the job she has to do? Would you consider putting a third home on the field with no training in her position? Goalkeeping is really an unpleasant experience for anyone if she is not prepared mentally and trained in the skills, and if she does not know what to expect or how to react. It can really be frightening; try it just once and see.

When doing stickwork drills, include the goalkeeper. These drills will do more toward her improvement than placing her in the goal and having everyone coming in unmarked and shooting. Have the goalkeeper get used to running and moving in her equipment. It is important that this equipment fit comfortably. Otherwise, it is an extra burden and bother. Catching is especially important because, unlike any other player, the goalkeeper cannot "ask" for the ball where she would like it. Have another player throw balls at different heights, angles, and speeds until the goalkeeper feels comfortable catching high, low, or waist-high on the right or left side. Of course there will be weak spots, and these should be areas of concentration. When the ball rebounds off the body, practice picking it up before it leaves the crease. Otherwise, it becomes very uncomfortable watching the first or second home pick the ball up and shoot it into the corner. After a save and after gaining control of the ball, the goalkeeper is ready to start the attack. Just think of how much time is saved with an accurate clear 40 or 50 yards up to the wing. This enables the other defense players to get a breather since they do not have to work the ball up the field.

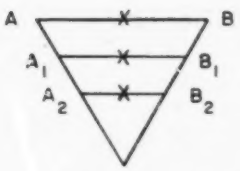
When choosing the goalkeeper, try to get someone who wants to play the position. If she does not want to play it, she is more likely to become afraid; when she becomes afraid, she ducks away from the ball, the ball goes past her, and a goal is scored! The goalkeeper should try to learn some of the different attack maneuvers, and, above all, concentrate on the play, even when the ball is at the other end. If one does not keep track of what is happening the whole time, when reentry into the game is finally made it might be too late to locate the ball and react to it.

One reassuring point for the American goalkeeper is that she is adequately protected from head to foot. If the equipment is good, and if the goalkeeper manages to get a part of her body covered by padding in front of the ball, she will not receive more than the normal buffeting of any sport. Included in this equipment is a face mask which a ball can't go through. Imagine playing goal without a face mask. I can't. In fact, I don't think I would. (On the other hand, the British would not think of playing goal *with* a face mask.) It is comfortable once you become used to it. Basically, besides

being physically safer, the mask is a psychological booster. Without it, I'm sure I would duck my head from high shots for fear of being hit. With it, I might still duck, but not as readily. When the Americans shot high, some of the British goalkeepers tended to shy away. I feel that they might not have done this if their faces had been protected. Most of the spectators and players in Great Britain and Ireland were interested and curious about my face mask. Some are now considering them for usage in schools. Personally, I think they are a good idea. A goalkeeper without a mask could also have a definite influence on the attack players, as they might be afraid to shoot hard or high for fear of injuring her.

Before putting an inexperienced goalkeeper into her first game, work with her regarding her position in relation to where the ball is or might be coming from. If this is not pointed out, she may or may not pick it up in a game. Even if she does, she probably will not be aware of it for a few games and by that time many unnecessary goals will have already been scored. If she is aware of positioning before entering a game situation, the game will serve as a reinforcement. She will be able to see for herself how it applies and recognize her mistakes through analysis.

In relation to the ball, the farther back toward the goal line one stands, the bigger the area to cover. Consider the goal as the base of a triangle, and a straight line from each post to the ball as sides of the triangle. Halve the angle and draw an imaginary straight line to the goal line. This is where a goalkeeper should position herself. As she steps away from the goal line towards the ball, the base of the triangle moves up (A_1B_1 or A_2B_2), thus reducing the angle and possible area for scoring.



Therefore, a goalkeeper who positions herself directly in front of the ball and about three feet (direct center) from the goal line has already greatly reduced the area in which an attack may score. As the ball moves to one side or the other, the goalkeeper moves also, but not in a straight line. Instead, each goalkeeper should draw an imaginary arc from post to post with her center position the greatest distance from the goal line (two to three feet). Her positions should progress sidewards and backwards until she is next to a post. As the ball moves, she takes small, quick side steps along this arc. In this way, she will always be opposite the ball and in the middle of the angle formed by the imaginary line from the ball to each post.

It should be remembered that exact positioning in relation to how far a goalkeeper should stand from the goal line is a personal thing and will differ with each person, depending on size and height, stickwork skills, footwork, and confidence. Also, it may vary with different attack and defensive combinations and players and the way they move.

As the goalkeeper gains confidence in her positioning and stickwork, she should not be afraid to leave the crease to pick up a loose ball or to intercept a pass. Once the decision to do this is made, there should be no hesitation in making the move, as the slightest hesitation could mean a step or two and prove to be disastrous.

The following diagrams and notes are general guides and will vary according to the situation and the goalkeeper:

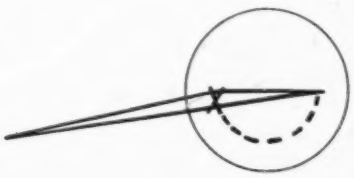


Figure 1

Very small angle.

Likely to be a high or low corner shot.

Vulnerable on nonstick side which makes it more difficult.

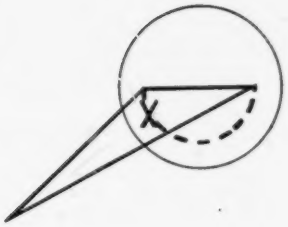


Figure 2

Must be ready to move in either direction.

Hard bouncy shot is very effective at this angle.

Apt to aim for high or waist-high left side as it is very hard to get the stick there, and the left catch is usually a weak spot.

Figure 3

Could be a difficult shot.

Could go to either side, high or low.

Consider who is shooting, how she is marked, and be ready to move either way at any height.

If out far enough, look for a bouncing shot.

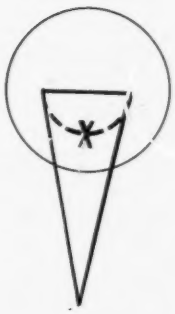


Figure 4

Could be a hard shot to stop.

Be on toes, alert, and ready to move into the ball.

Keep eye on the ball. It may be any type of shot or an attack may come in close for a soft, high shot or shovel.

Must try to outsmart the attack.

Figure 5

Similar to Figure 2 except vulnerable side is now the stick side, a little easier to handle.

On both these angles be careful not to overpull—i.e., cover too close to the goal post—as this leaves too big a space to shoot into.

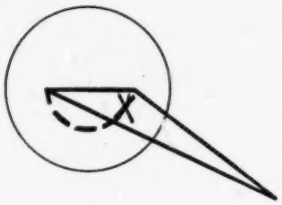


Figure 6

Just a little away from the post; most vulnerable side is stick side, high or low.

Be sure not to pull too far over to the post; it gives too much room.

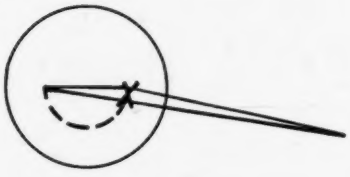


Figure 7

It is fairly safe to cover to the post.

Only place left to shoot is stick side, high or low.

If close enough, it will often be high and soft.

Don't give room between you and the post.

Don't pull beyond post as it makes the shot possible at a larger angle.

Lacrosse Stickwork to Music

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When the stickwork skills used in the game of lacrosse are analysed, it becomes evident that the game relies entirely on a succession of rhythmical movements of the body and stick to receive, deliver and control the ball, usually while the player is running in a forward direction. Each succession of movements which goes to build up a particular skill has its own rhythm, formed by the timing of the movements combined with the force exerted during them.

For example, in the cradling action, when the stick curls in toward the player, the action gathers speed and strength causing an accentuation at the end of the inward movement. The speed and strength decrease as the stick reverts to the starting position. A metric rhythm is so formed by the repetition of these two movements.

Figure 1. A beautiful rhythmic phrase: cradle curling in, twist to avoid, clear to go to goal.

The combination of two or more of these skills builds up a rhythmic phrase: for instance, cradling followed by an over-arm throw, or a low catch followed by cradling up to the carrying

position of the stick. In each of these cases cradling is included, as it is the foundation on which the stickwork skills are built, both technically and rhythmically.

With these facts in mind, it becomes possible to accompany the metric rhythms, produced by the repetition of selected skills, either by using music or percussion. The continuity of the accompaniment demands that the player either repeats one action or if she is more experienced, a succession of different actions, in a flowing phrase of movement, such as is used by the competent player on the lacrosse field. This opens up a new possibility – that of teaching and training players to music.

The situation in practising to music, is different from the normal situation, in that the timing of the whole phrase of movement is set by the accompaniment, rather than by the dictates of the game, but the accentuation and timing of the movement within the phrase remains the same in both cases and therefore practice to music should be of benefit. To the less experienced player it can be a more demanding form of play than the game, where she may take longer to control or deliver the ball than she should. In a practice governed by a musical rhythm, the beat waits for no one and the player must conform.

Stickwork accompanied by music is a help in teaching the beginner in the writer's experience. When she first picks up her stick, her movement tends to be over-tense because of the effort of keeping the ball in the stick and completing the pattern of movement required. This tension destroys the natural rhythm of the movement which can lead to the movement being wrongly accented and consequent loss of the ball. For instance in catching, as in cradling, the accent comes at the end of the gathering movement. If this accent is wrongly placed at the moment of contact with the ball, a snatching action results and the ball is batted away. The addition of music, which encourages correct accentuation of the movement will help to remedy the mistake.

When beginners are experiencing real difficulty, the removal of the ball is some times a help, providing they are encouraged to maintain a path of movement with the stick which would ensure that they would eventually find success with the ball. With the absence of the ball and with music to help them, they can indulge in the flow and flexibility of the movement. Their frustrations disappear, if only momentarily while they enjoy the feeling of the movement and they become more at home with their sticks. The ball is bound to be a restrictive influence when in a beginner's stick, and as flexible movement and the bound flow resulting from the restriction, do not go happily together, it becomes a real struggle. Music can then provide the necessary relaxing antidote. The use of

music can also be the answer to bad weather, when coaching beginners. If gives them a change and makes indoor coaching more fun.

More advanced practice for experienced players can be provided by building up sequences of stickwork skills and finding suitable music to accompany these phrases of movement. The addition of partner work, involving skills such as body-checking, shadowing players, and the ultimate in stickwork-to-music, is achieved when the ball is passed between the players during the phrase, while the rhythm is maintained. Greater emphasis can be placed on footwork in more advanced practice and in insisting on strong ankle work to give light, springy running. Thus the teacher is providing valuable stamina training.

As the players improve it is fun to tape record a variety of rhythms and create with them a whole dance sequence, involving many different stickwork skills, spatial floor patterns, group combinations and the accurate passing of the balls round the groups.

It is impossible to list suitable music for stickwork-to-music. Indeed, half the enjoyment of preparing the practices comes in discovering suitable records and new ideas. Herb Alpert's music has been a great standby and so has the great variety of Beatle music. National dance records can supply some useful accompaniment, especially of the slower type, such as the Israeli Hora.

This article does not attempt to put forward these ideas as a new method of teaching lacrosse, but simply as a recreational play, which is fun to do and at the same time can be of help to the would be lacrosse player. It provides an opportunity to exploit the rhythms contained in the stickwork to an exaggerated degree and to enjoy to the full, the flow of movement in these skills, which makes a well-played game so aesthetically satisfying to watch.

Borrowing Secrets from a U.S. Player*

ENID CLINCHARD RUSSELL
Shadyside Academy
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A collection of twenty-six lacrosse drills.

Each practice should start with a warm-up involving vigorous cradling. *Emphasize:* Bottom hand kept at waist level or above. The bottom elbow is kept in at the waist to be used as a pivot point. (1), (2).

(1) (2)

I. WARM-UP EXERCISES–CRADLING

1. Cradle and pivot with whistle

Girls start running, cradling hard to one side. With each blast of the whistle, the cradle is pulled hard to the other side. On a double whistle, the girls pivot and continue on in the opposite direction. *Emphasize:* Hard twist of body to other side, keep bottom hand up and elbow in.

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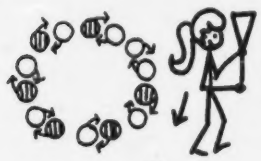
2. Grand right and left (as in a square dance)

An even number of girls is needed. Partners face each other in a circle. Everyone pulls to her left to avoid or dodge her partner. With the meeting of the next girl, the pull is to the right. With the third person pull left and next right and so on. (3)



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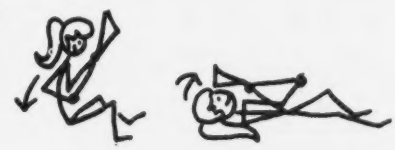


(4)

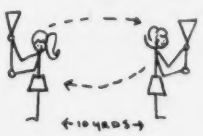
3. Stand, sit, lie, cradle (4)

Keep cradle movement going as player goes through each of these positions. When she has touched her head, she reverses the movement.

4. Close-face Cradle (5)

Two girls cradle facing each other. Put right foot out for balance and to get as close as possible. This forces the cradle over the head, as is necessary in a dodge or pivot.

(5)



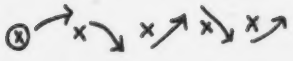
(6)

5. Back-to-back in partners (10 yards apart) (6)

Without moving, twist at the waist to catch over the left shoulder and pull right to throw side arm from the right. *Emphasize:* Passes are about shoulder level, twist from waist, not from knees. Feet do not move.

6. Serpentine (7)

Player dodges left then right through a line of girls. *Emphasize:* Twist of shoulders. Bottom elbow in and bottom hand up.



(7)

(8)

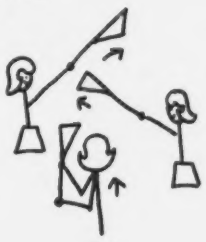
7. High Catch (8)

Two girls about 10 yards apart, face each other and throw and catch well above the head. *Emphasize:* Action comes more from wrist than from the whole arm.

8. Crosse dodging (9), (10)

Arrange girls in two lines facing the space between the two girls opposite them. Each girl holds her crosse high to form an overlapping covered bridge. Another player goes underneath cradling left and then right to avoid hitting the alternated sticks. *Emphasize:* A full cradle to the left or right. Adjust cradle and footsteps to the distance the sticks are apart. Most important, look up to see where the crosses are. *Don't* duck down and go under.

(9)



(10)

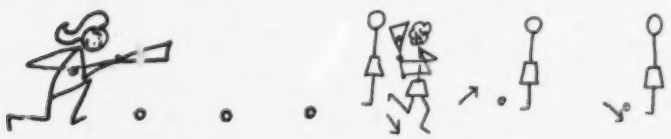
II. PICK UPS

Quick efficient pick ups often win the game. That goes for an experienced group as well as a beginner group.

1. 3 ball pick up (11)

Three balls in a row, each about 8 yards apart. A player picks up the first ball and brings her cradle up-right in three cradles. She then

drops the ball and is ready to pick up the next ball. After picking up the last ball, she pivots and comes back, again picking up each ball in turn. *Emphasize:* Right foot next to the ball, knees bent, and keep head over the ball as forward movement is continued.



(11) (12)

2. 3 ball pick up and dodge (11), (12)

Same as previous drill except there is a player standing after each ball. Immediately after the pick-up, the player must execute a dodge. After dodge, drop the ball and continue as before. After the last pick up and dodge, pivot and return the same way. For more skilled players, the person being dodged may stick check as the player goes by. *Emphasize:* A hard twist of the shoulders with each dodge.

3. Bridge pick up (13)

A reaches out arms to hold stick up-right to form a bridge. A ball is placed underneath the bridge. *B* bends low, picks up the ball, and dodges *C*, who is standing on the other side of the bridge. *C* may body check and stick check as *B* comes through. Later a fourth player, *D*, should be added so *B* can dodge and then make a pass to *D*. *D's* position will vary according to the type of pass desired by the coach. *Emphasize:* Get cradle up-right quickly so a successful dodge can be executed immediately.

(13) (14)

4. Pick up going away (14)

One line on either side of the coach (*A*). The coach rolls the ball away and the first person from each line runs after it. *Emphasize:* Catch up to ball and step PAST it, as player bends down to execute pick up. Pick up the ball the first time, don't swat at it or push it away from opponent.

5. Pick up coming toward (15)

Shuttle formation. Ball rolled on ground to each other. *Emphasize:* Keep eye on the ball, stick perpendicular to the ground, give back with the beginning of the cradle, come to meet the ball.

(15)

(16)

III. CATCHING

1. Shuttle (16)

This can be used with a great variety of throws and catches; however, it is of no value unless accuracy, timing, and moving are stressed. For example, overarm, shovel, pull to the right passes can be practiced, and ground pick ups as well. Make a game and see how many proper ones can be caught in a row. *Emphasize:* Catch and throw on the move, accurate passes, and quick stick work. For variety, move both lines to their left, or right. The player runs straight while the pass goes left or right.

2. Circle give-and-go (17)

8 to 10 girls form a large circle. Another player runs around the outside of the circle passing and receiving from each girl in turn. *Emphasize:* Accurate passing. This can be modified by using ground passes or moving to the left or right.

3. Double pass and catch (18)

2 players face each other about 20 yards apart. Each has a ball which she passes to the mid-point *A*, in the center. Each has thrown the ball on the run. She continues running to catch the other ball and then dodges her on-coming partner. Again, a variety of passes

may be used. *Emphasize:* Pass to mid-point *A*, quick catch and dodge.

4. Passing in pairs in a circle. (About 15 yards apart) (19)

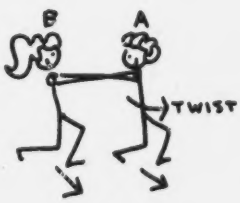
Going left, use a shovel pass or pull to the right, catch left. Going right, use an overarm and catch right. Also, passes on the ground are excellent practice for pick ups. *Emphasize:* Pass to *space* in front of player.

(17)

(18)

(19)

(20)



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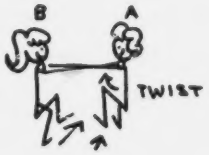

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5. Passing in 3's around the field (20)

#1 pass–long one over B's shoulder. #2 pass–short one right to *C*. #3 pass–hard bumpy ground pass back to *A*. All three girls are moving forward around the field. *A* should be at least 10 yards behind *B* and *C*, who are about 5 yards apart. *Emphasize:* Accurate pass over shoulder, give with crosse on ground pick up.

IV. DEFENSE

1. Body checking (21), (22)

Partners face each other with hands on each other's shoulders. Defense player *A* twists feet so feet are going the same direction as attack player *B* is running. When attack changes direction, *B* must pivot hips quickly so her feet are again going in the same direction as those of the attack. *Emphasize:* Player can't run as fast backwards as forward, so rotate hips so feet go forward.

(23)

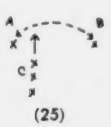
(24)

2. Stick checking (23)

Same as previous drill only players hold sticks. Attack player cradles and runs to one side and then switches to the other side. Defense player must twist hips to follow feet as well as keep her stick up in front of the attack's crosse. *Emphasize:* Quick change of foot direction for defense.

3. Interceptions (24), (25)

A and *B* are stationary and have a catch about 15 yards apart. *C* runs to intercept ball from *B after A* has passed to *B*. If she is successful, she passes the ball back to *A* or *B* and the catch continues for the next person. *Emphasize: C* must not start until after *A* has thrown the ball. The interception must be made on the run. After a while, move line *C* to the left so the interception is now made with a left catch. *C* now runs after *B* has made the pass.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(26)

V. ATTACK

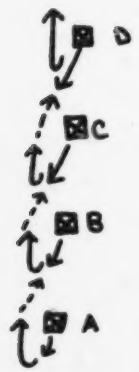
Combine shooting with as many drills as possible.

1. Cut, pivot, shoot (26)

Three lines use the entire half of the field. *A* starts with a ground pick up and then goes to goal. *B* holds cut until *A* has possession of the ball and is on her way to the goal. She then cuts directly to *A*. On catch, *B* pivots and goes to goal. *C* holds cut until *B* is on way to goal, then cuts directly to *B*. On catch, *C* pivots and shoots at the goal. Later, defense players can be added. *Emphasize:* Timing—hold cut until player is ready to pass. Cut at top speed.

2. Cut and pivot (27)

4 girls in a line, each about 10 yards apart. *A* starts with pick up going away from the line. She then pivots and passes to *B*, who has held cut until *A* is coming toward her. *B* catches, pivots, and goes toward *C*. *C* continues as *B* and so does *D*. At *D*, reverse and come back. At intervals, *A* and *D*, and *B* and *C* change places. *Emphasize:* Hold cut, make cut at top speed.



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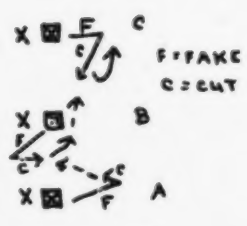
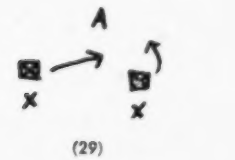


(28)

3. Cut and pivot with defense (28), (29), (30)

Same as previous exercise but add a defense player. Attack must now fake around her defense and dodge her before she can pass. *Emphasize:* Quick fake and a decisive, top-speed cut. More advanced players should note the direction of the attacker's pivot and make her cut to the same side. This will make it easier for the player to pass the ball.



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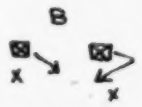

(30)

(31)

(32)

4. Give and go (31)

A passes to *B* who catches and goes on across the path of *A*. *A* continues to run run in order to receive the ball down field at point *C*. *Emphasize: A* sprints at top speed to get to point *C*.

5. Attack and defense (32)

Teacher, *A*, passes ball to player in line *B* or *C*, who cuts to *A* for pass, catches, and goes to goal. A defense player *D* comes out to pick up girl with ball. *D* body checks and stick checks, while attack, *B* or *C*, tries to dodge. If she is successful, she shoots at the goal. You might add another defense player, for *D* or the goal keeper to clear to. *Emphasize:* Attack–go straight to goal. Defense–don't run at attack. Give with her. Body check first, then stick check.

Shooting With Variety

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Shooting is very important in the game of lacrosse, and yet only a few players can successfully execute a variety of shots. Variety is necessary in order to take the best advantage of the game situation. A good goalkeeper is quick to learn and attack players' weak shots. Discussed below are four basic shots and two more recently developed shots.

The Long Shot

The long shot is basically a powerful bounce shot which may be executed from as far as 40 yards. The ball is frequently on its way to goal before the goalkeeper has time to line it up. The release is relatively free from an opponent's check if the shot is made immediately after receiving a cross-field pass or after dodging one's opponent.

The ball bullets downward through the air contacting the ground near the crease. Keep in mind that a ball hitting too far inside the crease will enable the goalkeeper to step out and catch it. On the other hand, ground contact too far out will give the goalkeeper sufficient time to align the bounce.

Goalkeepers have stated that waist-level bounces are the most difficult to stop. The shooter can gauge this to some extent by remembering that the angle of bounce equals the angle of reflection. The turf, however, makes the bounce different if not impossible to calculate. Grounds which are hard and ever so slightly unlevel will change the angle of the bounce sufficiently to the left or right of the goalie's aligned crosse. Occasionally, of course, the ball will rebound outside of the cage. If the turf is soft and soggy, the bounce shot is hopeless. More than once at National Tournaments the long shot has contacted soggy ground with a "thud" and no rebound at all. With such conditions a very low long shot with no bounce is sometimes attempted. This, however, is more like a throw than a shot to most goalkeepers. There is the possibility on any long shot that the goalkeeper's own defense may block her line of vision. If a goalkeeper is lining up for your shot, cradle on the nonthrowing side. Usually she will line herself up with the position of the cradle rather than the position of the shot.

The action of the shooter varies considerably. Some British instructors teach that the ball should be high in the crosse, the crosse

as high as possible, and the body stretched to its fullest extent so that the distance from the ankle to crosse tip is its maximum and a straight line. The action comes from a break in the ankles, which is the fulcrum point. The advantage of this is, of course, the longer the lever, the more powerful the shot.

Some use a deer leap with the crosse high which utilizes the body thrust. Others use a slight sidearm which tends to put a spin on the ball. While all have been used with considerable success depending on individual differences, the most frequently used is the overarm, with crosse reasonably high, and a natural run.

While force and accuracy are essential, quickness and the unexpected release of the ball cannot be over emphasized.

The Soft Placement Shots

The soft placement shots are the most accurate (within one-half inch when practiced). In a one-to-one situation all shots attempted should be successful. This position is ideal and affords the offense the possibility of making 100 percent of her shots. Maneuvering into this position, however, may be more risky than shooting from a one-and-two situation.

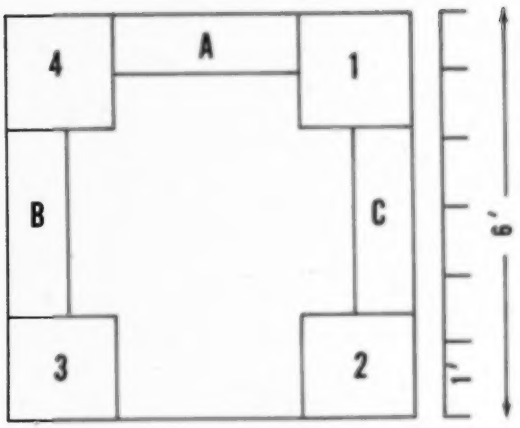
High corner shots against the average or better than average goalkeeper are quite successful, and the higher the ball is released, the more successful it is. Note in Figure 1 that Area One is more difficult for the goalkeeper than is Area Four on her stick side. (If either the goalkeeper or the shooter is a beginner, shots should be aimed for Area Two or Three.) Any place along the edge of the cage is good. Often a ball can be lightly popped in on a side (Areas B and C) behind the goalkeeper. A ball entering through Area A is simply dropped behind the goalkeeper's head.

A soft, well-placed shot is one of the loveliest movements in lacrosse.

The Soft Shot, Behind the Head

The high soft shot released from behind the head is very valuable when the attack player is forced beyond a good shooting angle (Figure 2). Other advantages are that (1) the crosse is pulled away from the opponent's stick enabling a clean shot and (2) the changed position of release often catches the goalie unprepared.

To execute this shot the crosse must first be lifted. The top hand moves behind the shooter's head while the bottom hand moves across the body, up and out. The crosse assumes a position parallel to the ground just before the shot. The release of the ball is a quick wrist action. The shot is actually a soft one directed to the opposite side of the goal cage entering in the top six inches.



GOAL CAGE

Figure 1

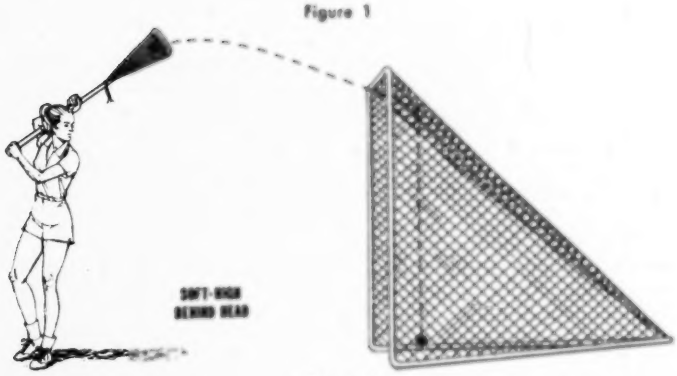


Figure 2

The Underarm Shot

The underarm shot (Figure 3), when used at a distance, can be extremely powerful. At close range it needs only to be quick. This shovel like shot travels parallel to or along the ground, passing the goalkeeper below knee level. The shot can be easily directed and is most valuable after the goalkeeper has been drawn to one side. The greatest advantage of the underarm shot is that an offensive stick which is being heavily checked can almost find freedom for the underarm shot when dropping the head of the crosse.

The shot is most frequently used when crossing in front of the goal from right to left. It is also very valuable when the ball is received immediately in front of the goal as a "catch-twist-shoot."

Figure 3

The Cross Arm Shot

This shot derives its name from the position of the follow-through. It begins from the cradle position. The top of the crosse moves diagonally across the body from the upper right to the lower left. Arms end up crossed. The ball is directed to a space in the lower half of the cage.

This shot has been developed by Enid Russell, United States 2nd home. Its advantages are that it is a very quick and accurate shot.

The Reversal Shot

The high soft reversal shot is virtually unused even though its beauty and effectiveness are great (Figure 4). As a matter of fact, until this year no one but this author had used it.

This is the way the shot was developed. I received the ball high on the right, and cradled it to the left. I saw a gorgeous opening which the goalkeeper could not possibly have covered. I attempted the shot from that position. It was unsuccessful, but I had observed a need. Later that same day I began to develop the shot. Since then, though

Figure 4

not having mastered it to perfection, I have used the shot successfully. Goalkeepers have stated that the ball is extremely difficult to follow. The ball is released as high as possible with a flick of the wrists and drops behind the goalkeeper's head, entering the cage somewhere along the top 8 inches.

Wing Defense

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Defense wing is one of the most exciting positions to play. It can be defined as the position of "constant action." A defense wing must be concerned about her own opponent, positioning for an interchange, and often initiating attack play.

Marking her Opponent

There are sound reasons why the marking of the attack wing closely at mid-field is a matter of importance. It is easy for the opposing defense to pass to a free wing. Any player who is not being pressed has time to look, think, and see more opportunities. By marking the attack wing tightly, however, a defense wing can discourage use of the wing, make the connection of the opposing defense to its offense difficult, or make a vital interception.

It is very important to "play the ball" as a defense wing. There is nothing more satisfying than making a good, clean interception and a defense wing should develop confidence in her ability to get the ball. Granted, there will be times when the interception is missed and, if a quick reaction is not made, the defense may be left in the dust of the attack player. Should she not get the ball, she must immediately turn to tackle back on her wing or cut straight to goal in a position to interchange or replace another defense player. Anticipation and timing are of utmost importance in this type of play. If a defense wing judges an interception too risky to attempt by close marking, she is still in position to break up an attacking movement. Making an attack play difficult far up the wing position is of great value to the entire defensive play.

If her attack wing decides to go into its defensive half of the field to help or to receive a clear, she should go with her opponent to about the "25-yard-line." If the attack wing goes farther, the defensive team's attack wing can mark. By forcing her opponent deep into the opponents' defensive area, she will make the rest of the opposing team pull upfield to adjust to the space which has now been created. Now her opponents have to pass over wide areas before they can get into a goal-threatening area. Forcing the attack

to make long passes makes interceptions easier for the rest of her defense.

Easy as this sounds, the technique of marking her opponent closely is a problem for the novice. The first thing to consider is speed, both distance and sprinting. If her opponent is faster than she is in a distance run but she is quicker in the start, the defense wing marks by standing goal side and even. When the ball comes, she sprints and intercepts. At this point she has a decision to make: pass if someone is free or go on the attack as an extra.

Another way to mark her opponent when the defense wing is a quick starter to play a few steps behind or nearly parallel with her own front toe even with her opponent's rear heel. Then she sprints as the attack wing goes for the ball. If she cannot intercept, she may mark closely as the wing receives the ball.

In case she is a slower starter and runner than her opponent, she must still mark closely. When the attack goes to receive a pass, she should go with her as best she can. When the wing receives the ball, the defense begins stick-checking. If she is not close enough, she body-checks (yes, at mid-field). She has now accomplished two things: she has cut the pace of the attack and, more important, she has made her opponent work harder. The attack must catch, pivot, dodge, and pass under pressure. It goes without saying that this is much easier if no one is pressuring. Remember, if she cannot get the ball first, she should stay with her opponent and at least make the opponent's play more difficult.

Certain cardinal principles should be set up for the positioning of a defense wing on the draw. She should–

1. Determine which center will most likely win the draw and the trajectory of the ball, high and arched or low and sharp.
2. Start on the goal side of her opponent and never get pushed or maneuvered out of this position.
3. Prepare for the unexpected.
4. Have her crosse in position to receive the ball.
5. Try to play the ball in the air.
6. Constantly reposition if her attack player changes direction of movement.
7. Drop back slightly if the draw goes to the opposite side.

Positioning for an Interchange

It takes much cooperation between the defense wings and the cover point to result in an effective interchange. The defense wing should always recover quickly when dropping back as the ball comes

down the opposite side. She can help her cover point by merely saying, "I'm with you." Thus the cover point will tackle the free attack player with full confidence that the defense wing is in the proper position for the interchange. Many a goal has been scored because a defense wing has failed to drop back to position properly. The interchange must be perfectly timed to hamper the movement of the second home and still not allow the attack wing to be too obviously open. A smooth interchange is the result of constant practice among defense players. As most attack difficulties come from a total defense set-up, it is also important to develop an understanding and knowledge of her fellow defense players' movements.

Initiating Attack Play

As we have mentioned, defense wings can be an asset in starting attacking movements. We advocate this not only for defense wings but for third man as well. Having an extra player moving into the attack can be a very successful means of upsetting the opposing team. Usually the defense wing should go at top speed toward goal, pass, and continue on only if her attack wing teammate has dropped back to replace her. Defense wings, it is possible to score. Don't be afraid to do the unexpected!

When one considers all the above, one realizes immediately that a defense wing must have stamina and the ability to accelerate quickly. A good defense wing must love to run and should be constantly on the move up and down the field. Speed is necessary for close marking up the field and change of direction in positioning for a defensive interchange. She has a great deal of area to cover on the field, and that extra spurt of speed often enables her to pick up a loose ball or make an interception. When running at top speed, a wing must be able to change direction quickly. If the opposing attack wing makes a quick breakthrough, she must not allow her to pass without making an effort to reclaim the ball. Speed as a defense can also cause much confusion for her opponents if she uses it quickly on an attack play.

The position of defense wing is a very creative one. As has been shown, the variety of opportunities is limited only to the level of skill and initiative of the individual.

Spacing and Pacing the Attack*

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Perceptual training should go hand in hand with the teaching of techniques, to ensure success in a team sport and to enable the learner to gain the fullest benefits from her physical education experiences. The player must be guided in developing an awareness of the qualities of movement, her own qualities as well as those of her teammates and opponents. She must experience the dimensions of force, of time, and of space. Perceptual training for lacrosse demands a two-fold emphasis: kinesthetic, and visual.

Learning Techniques

While learning techniques, *the player should be gaining kinesthetic sensitivity to the giving and receiving of force.*

From the very first lesson a player must be made aware of the difference between a sympathetic giving of the ball to a teammate and a non-sympathetic attempt to put the ball past an opponent. Since both these skills demand control and accuracy, the player must learn what positions, speeds, and spins make a ball easy or difficult to receive. She must understand these qualities in a cognitive sense and know how to produce them without conscious thought while moving at top speed under defensive harassment.

Thus as each skill is introduced in an orderly progression, and the player approximates mastery of it with each review session, *so also must she be gaining a visual sensitivity to the temporal and spatial qualities of player and ball movements,* concurrently. This would seem to demand practice plans built on variations of the temporal and spatial elements. Rather than devoting 15 minutes of the session to a shuttle drill on throwing and catching, there should be shorter periods for each variation: a short, high throw, for example, followed by a medium distance throw at shoulder-height, and finally a long bounce. The player, from the beginning, will develop more sensitivity to the angle of release and to the force and quickness of the bottom-hand pull in the throw. She will also see and experience the difficulties of catching at changing levels, distances, and speeds. From similar variations on the lateral placement of the throw, she will gain an awareness of the head and shoulder movements, and will not be relegated to a frontal plane dimension in her shooting and passing.

* Pictures in this article by courtesy of Nancy Blum.

Figure 1. Under defensive harassment.

Figure 2. Getting free from opponent.

Ultimately, *she must be guided in the synthesizing of her kinesthetic responses to her visual perceptions.* Structured practice of the various tempos of the receiver and/or thrower will also prevent later movement faults. By drilling on this aspect from the early stages, a player will develop an awareness of moving into a catch at an increasing tempo, of the sensation of keeping the feet moving as she throws, and of judging the time-space elements at different speeds. Consciousness of what the feet are doing, of various rhythms, and of various speeds in relation to other players should later enable a player to change pace when making a cut or a dodge. It should also generally improve her footwork and body control in crowded field situations and rapid changes of direction.

Figure 3. Catching at different levels.

High catch.

Shoulder level.

Waist level.

Pick up.

Passing

From the beginning the coach should stress that a pass is a giving of the ball *to* a teammate, not a throw *at* her. The receiver will always designate where she wants the pass by "showing." To ensure safety, to build confidence, and to increase the probability of catching, the ball should be thrown to the space on the side upon which the receiver shows. Thus, beginners learn not to throw on line with their teammates' noses! A straight-on pass is threatening to the head-shy, and presents the same awkward moment of choice that occurs when a tennis ball is hit at one's midline.

For a pass to be truly sympathetic, the ball must arrive at the speed, height, and position which best enables a successful catch. Once these basic elements are mastered, the definition of sympathetic can be expanded to fit the competitive situation. While maintaining the previous ball control, the thrower now must learn to know when to pass in relation to the timing of a cut, to judge where to place a pass to a moving teammate so as not to slow her down, and to calculate an opponent's pace to avoid having the pass intercepted. Once a player can give a sympathetic pass without conscious thought, she is free to make the more advanced-level decision of which receiver is best situated to make the ongoing play.

Cutting

To clarify the concept of cutting, it is helpful to indicate the dual purpose of a cut by separate names. Thus a *preliminary cut* might designate a preparatory move which opens a future space either for oneself or for one's teammate. A *real cut* might designate a move into a space when a player is asking for a pass. Although the mechanics of both types of cuts are often the same to disguise the intent from one's opponent, the player must have a clear understanding of each type, for the timing of a preliminary cut usually will be in advance of a real cut.

A cut must be a sharp direct, quick move. When a player asks for a pass, her cut must be delayed until the person with the ball has control and looks downfield. Then a quick, direct run is made on a diagonal to the person with the ball. Ideally the cutter should still be accelerating when she receives the ball and should continue gaining speed until she is able to pass or shoot. If the defender is still able to mark tightly, if the passer fumbles or is delayed, or if the cut is leading into a congested area or is too far from a path to goal, then the cutter should stop and recut. She should not slow down or muddle around in a circle. Her first, second, or third cut must all be quick, sharp, and direct. All cuts must be made by accelerating away from an opponent and toward the ball or goal.

Teamwork (Movement Patterns)

To aid the player in her early scrimmage efforts, while she is still building her own repertory of time-space understandings and cannot rely on the consistency of her teammates' movement patterns, the coach should establish a time-space frame of reference to be used as a field guide. The following suggestions can serve to provide a workable structure until the players master temporal-spatial concepts, develop empathy with their teammates, and are able to move into a creative, spontaneous control of the flow of the game.

(1) Keep an open, working space in front of the goal, to prevent a scrum. It should be stressed that the area from second home on down is an area for receiving, passing, or shooting—not loitering.

Figure 4. No space—scrum.

Figure 5. Space—room for cutting.

(2) Establish a pecking order for cuts and loose balls, to avoid congested play. Always have the player closest to the ball make the first move, and then each of the others in order of distance from the ball takes her clue as to direction from the one in front of her.

(3) As for loose balls, make the player responsible who is beyond the passed player. This means that players will always be going to meet loose balls, not chasing them, and it also develops the concept of backing up teammates and attempts for goal.

(4) Stress the importance of the whole team's shifting to the attack when the ball changes hands.

(5) Stagger the timing of cuts in relation to the distance from the ball.

(6) Spurt into a space away from one's opponent and teammates.

Now when the coach yells "cut!" the players will not run willy-nilly around the field in confusion. They will know when, where, and how to cut for the ball. The passer now has a choice of

several receivers; anticipation is developed, and the players begin to maneuver into position with preliminary cuts as they see the pattern unfolding.

By structuring temporal and spatial elements and giving players kinesthetic experience in sensitivity, the ultimate benefits of the game should be realized by all. Perceptual training of this nature should aid in the achievement of *game sense* which all too often is left to chance development.

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